

State of Alaska

Department of Transportation and Public Facilities

Southeast Region

JUNEAU BRIDGE REPAIR & UPGRADE TROUT STREET BRIDGE REPLACEMENT NO. 1786 PROJECT No. 69561/AC-BR-0003(151)

JUNEAU, ALASKA

THIS
PROJECT

Project As-Built Drawings have been
reviewed by the Project Engineer and
represent to the best of my knowledge,
the project as constructed.

PE KJN Date 9/10/13

PROJECT SUMMARY

NEW PILE-SUPPORTED BRIDGE SPAN = 50 FT
LENGTH OF BASE BID MAINLINE PAVING = 140 FT
WIDTH OF BASE BID MAINLINE PAVING = 24 FT
LENGTH OF PROJECT = 217 FT

DESIGN DESIGNATION

FUNCTIONAL CLASSIFICATION: URBAN LOCAL ROAD
PROJECT TYPE: BRIDGE REPLACEMENT
PROJECT DESIGN LIFE: 50 YEARS

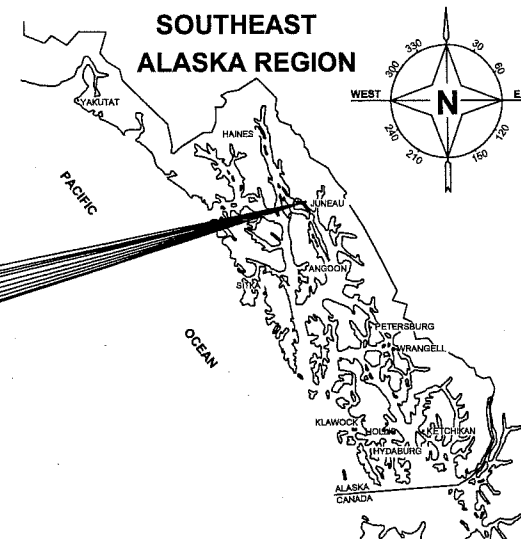
	LAST YEAR WITH TRAFFIC DATA	CONSTRUCTION YEAR +1	MID-LIFE YEAR	FUTURE YEAR
	2010	2013	2038	2063
ADT**	4370	4440	5020	5690
DHV	520	530	600	680
PEAK HOUR FACTOR	0.9	0.9	0.9	0.9
DIRECTIONAL DISTRIBUTION	55/45	55/45	55/45	55/45
PERCENT COMMERCIAL TRUCKS	11.5%	11.5%	11.5%	11.5%
COMPOUND GROWTH RATE		0.50%	0.50%	0.50%
PEDESTRIANS (NUMBER/DAY)	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
BICYCLISTS (NUMBER/DAY)	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE

DESIGN VEHICLE FOR TURNING: WB-50
DESIGN VEHICLE FOR LOADING: HS25
EQUIVALENT AXLE LOADS: 3,150,000 LBS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

E-13.00 SEIMENT CONTROL SYSTEM (SILT BARRIER)
G-00.01 STANDARD GUARDRAIL HARDWARE (NUTS, BOLTS, WASHERS)
G-04.07 STEEL POST W-BEAM GUARDRAIL
I-21.01 PARALLEL CURB RAMP
L-23.01 JUNCTION BOX FOR ELECTROLIER
T-21.02 PAVEMENT MARKING APPLICATIONS

PROJECT
LOCATION



PROJECT INDEX

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N4	RIPRAP PLAN AND SECTION
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N7	ABUTMENT DETAILS
N8	BRIDGE VOIDED SLAB GIRDERS
N9	BRIDGE RAIL ON CURB
N10	BRIDGE RAIL DETAILS
P1	STRIPING AND SIGNAGE PLAN
S1	TRAFFIC CONTROL PLAN
U1	UTILITY PLAN AND DETAILS

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN\3 CIVIL\A1.DWG TAB:A1

PLOT: PSPACE OR MSPACE: 1=1(F)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES

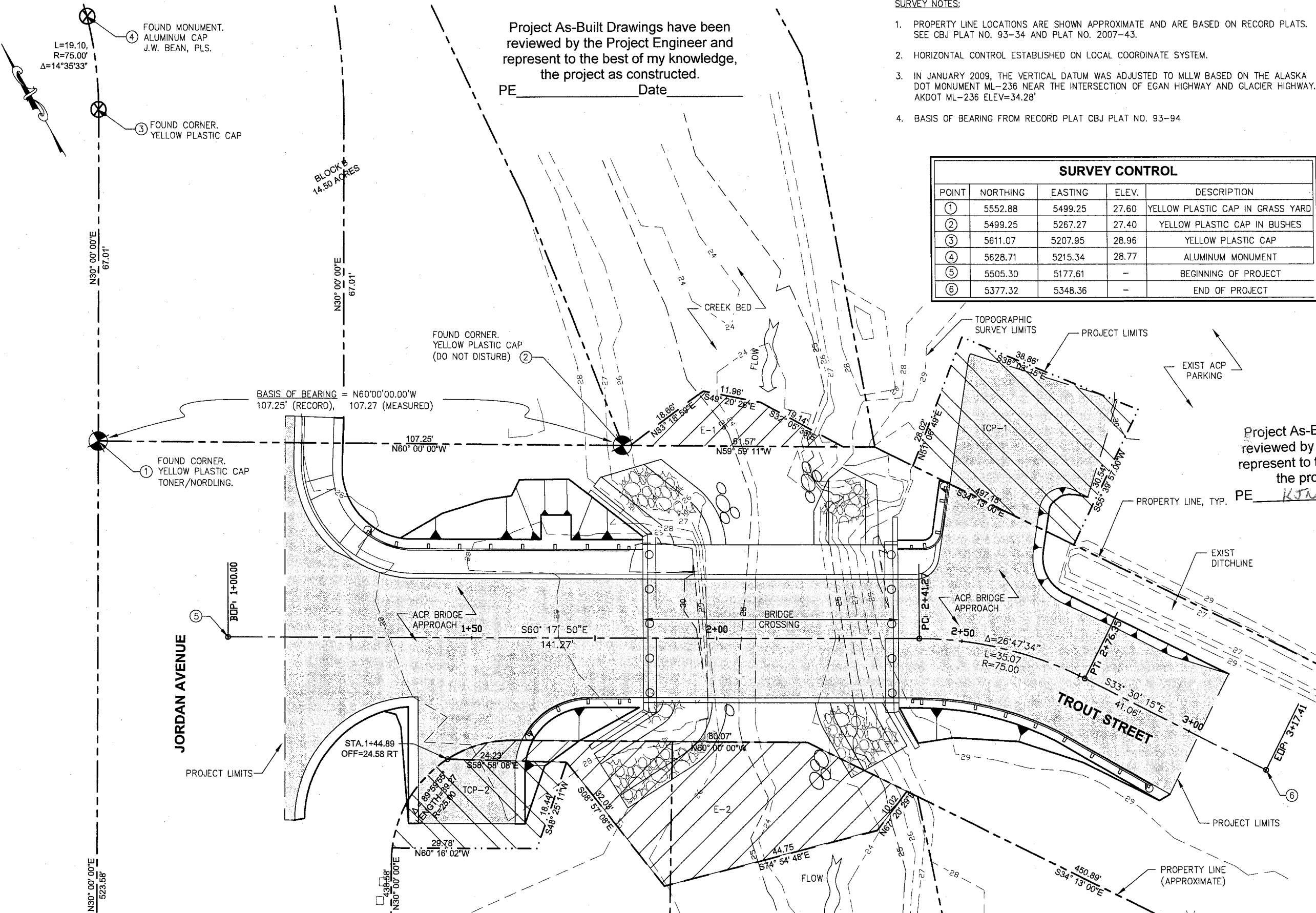
APPROVED: Charles W. Correa 4/4/12
REGIONAL PRE-CONSTRUCTION ENGINEER
CHARLES W. CORREA, P.E. DATE

APPROVED: Albert H. Clough 5/14/2012
DIRECTOR, SOUTHEAST REGION
ALBERT H. CLOUGH, CPG DATE

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD
CONDITION: Maureen H. Kase 10/29/13
CONSTRUCTION PROJECT MANAGER DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	69561/AC-BR-0003(151)	2012	A1	29

PLANS PREPARED BY
PND ENGINEERS, INC.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE _____ Date _____

SURVEY NOTES:

1. PROPERTY LINE LOCATIONS ARE SHOWN APPROXIMATE AND ARE BASED ON RECORD PLATS. SEE CBJ PLAT NO. 93-34 AND PLAT NO. 2007-43.
2. HORIZONTAL CONTROL ESTABLISHED ON LOCAL COORDINATE SYSTEM.
3. IN JANUARY 2009, THE VERTICAL DATUM WAS ADJUSTED TO MLLW BASED ON THE ALASKA DOT MONUMENT ML-236 NEAR THE INTERSECTION OF EGAN HIGHWAY AND GLACIER HIGHWAY. AKDOT ML-236 ELEV=34.28'
4. BASIS OF BEARING FROM RECORD PLAT CBJ PLAT NO. 93-94

SURVEY CONTROL

POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
①	5552.88	5499.25	27.60	YELLOW PLASTIC CAP IN GRASS YARD
②	5499.25	5267.27	27.40	YELLOW PLASTIC CAP IN BUSHES
③	5611.07	5207.95	28.96	YELLOW PLASTIC CAP
④	5628.71	5215.34	28.77	ALUMINUM MONUMENT
⑤	5505.30	5177.61	-	BEGINNING OF PROJECT
⑥	5377.32	5348.36	-	END OF PROJECT

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PE KJN Date 9/10/13

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

SURVEY CONTROL

PROJECT DESIGNATION

69561/AC-BR-0003(151)

STATE

YEAR

ALASKA

2012

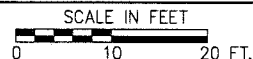
SHEET NUMBER

TOTAL SHEETS

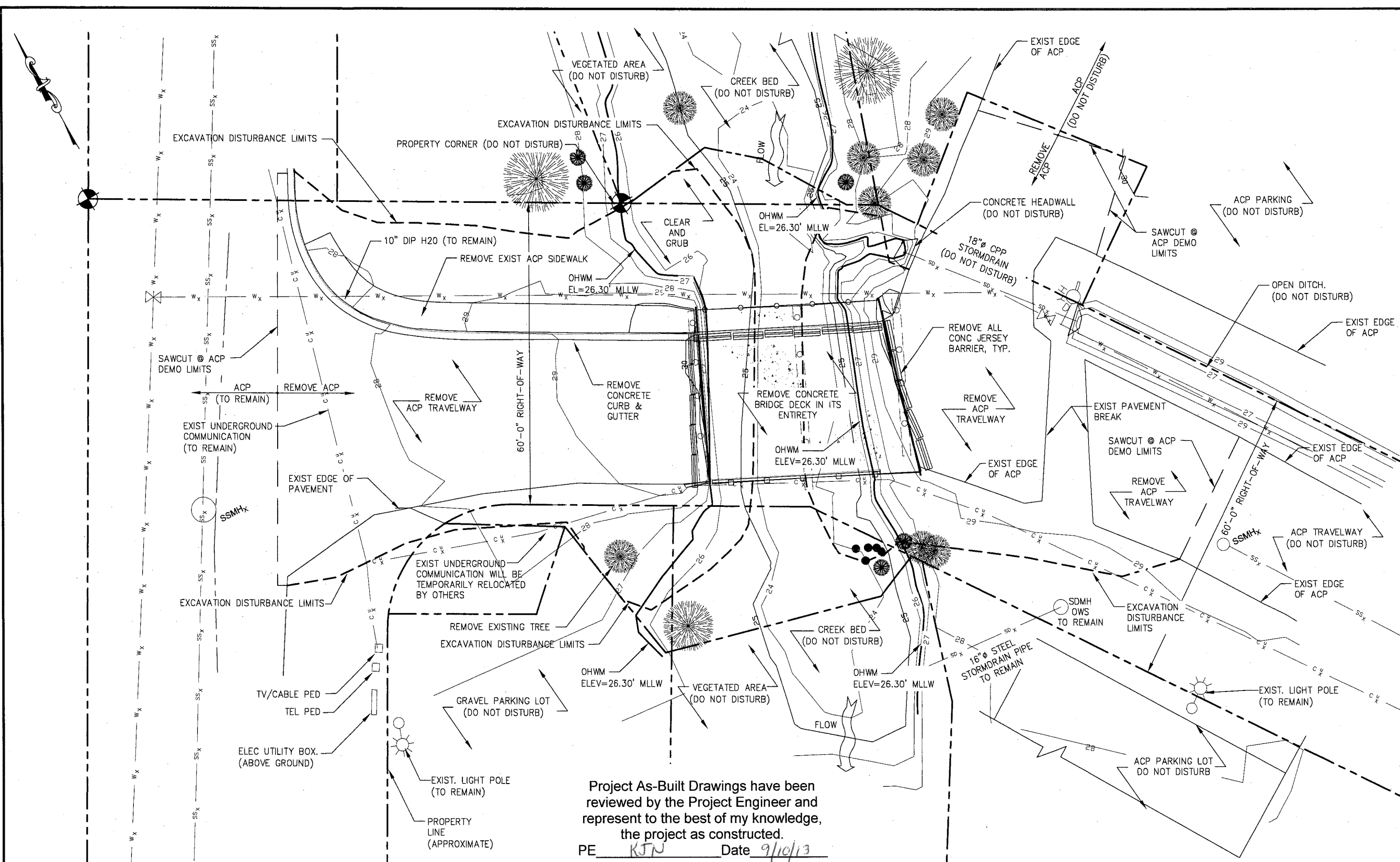
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29

1 SURVEY CONTROL



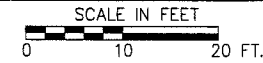
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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 PE RJN Date 9/10/13

EXISTING CONDITIONS AND DEMOLITION PLAN

1



- SURVEY NOTES:**
- TOPOGRAPHY BASED UPON FIELD SURVEY BY PND CONDUCTED OCTOBER 2008 AND JULY 2011
 - EXISTING UTILITIES ARE BASED UPON AS-BUILT RECORDS AND SURVEYED INFORMATION. FIELD VERIFY ALL EXISTING UTILITIES.

- DEMOLITION NOTES:**
- EXCAVATION DISTURBANCE LIMITS SHOWN ARE APPROXIMATE. FIELD VERIFY BASED ON DESIGN GRADES, TYPICAL SECTIONS AND EXISTING CONDITIONS. FIELD VERIFY EXISTING VEGETATION FOR CLEARING AND GRUBBING. SEE SITE PLAN AND LAYOUT TABLES FOR EXCAVATION DISTURBANCE LIMITS.
 - ASPHALT DEMOLITION LIMITS SHOWN ARE APPROXIMATE. SEE SITE PLAN AND LAYOUT TABLES FOR PROJECT LIMITS.
 - REMOVE, SALVAGE AND SORT EXISTING SUBGRADE MATERIAL FROM EXISTING BRIDGE APPROACH RAMPS. ALL MATERIAL THAT IS DETERMINED TO BE REUSABLE SHALL BE STOCKPILED FOR REUSE DURING CONSTRUCTION. ALL OTHER MATERIAL SHALL BE CONSIDERED WASTE AND DISPOSED OF AT AN APPROVED SITE.
 - SEE A4.0 FOR EXISTING BRIDGE AND BRIDGE STRUCTURE DEMOLITION PLAN.

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PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN\3 CIVIL\A3.DWG

LANCE GREER
 TAB: A3 Monday, April 02, 2012 4:32:38 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROPERTY LINES

SD X STORM DRAIN

SS X SANITARY SEWER

W X WATER

E X ELECTRIC (UNDERGROUND)

C X COMMUNICATION (UNDERGROUND)

LIGHT POLE

SURVEY CONTROL

SSMH X SANITARY SEWER MANHOLE

WATER VALVE

FIRE HYDRANT

TREE (VARIOUS SIZES)

PLAN LEGEND

CHECKED BY: CMG

f-2-12

PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR & UPGRADE
 TROUT STREET BRIDGE
 NO.1786**

EXISTING CONDITIONS AND DEMOLITION PLAN

PROJECT DESIGNATION
69561/AC-BR-0003(151)

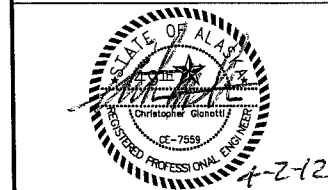
STATE	YEAR
ALASKA	2012

SHEET NUMBER	TOTAL SHEETS
A3	29

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY:

DRAWN BY:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

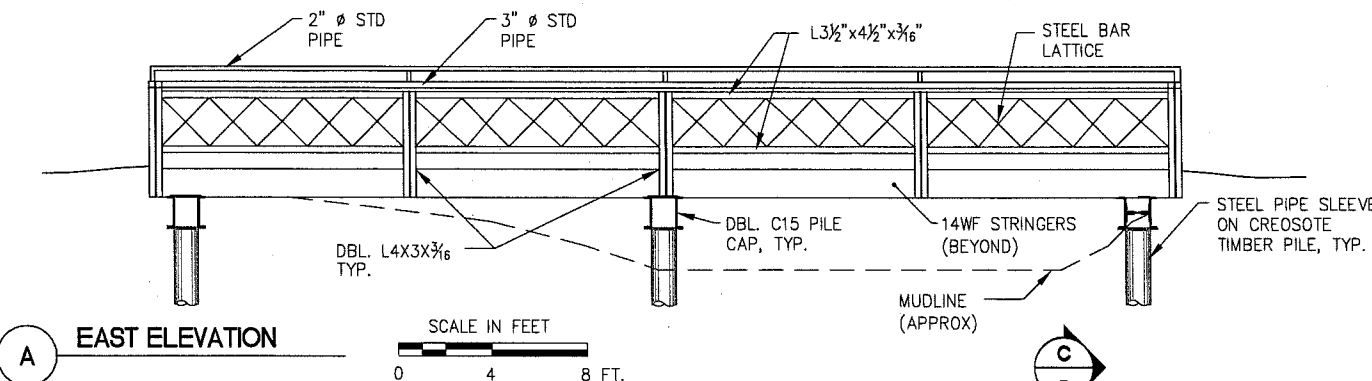
**JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786**

BRIDGE DEMOLITION PLAN

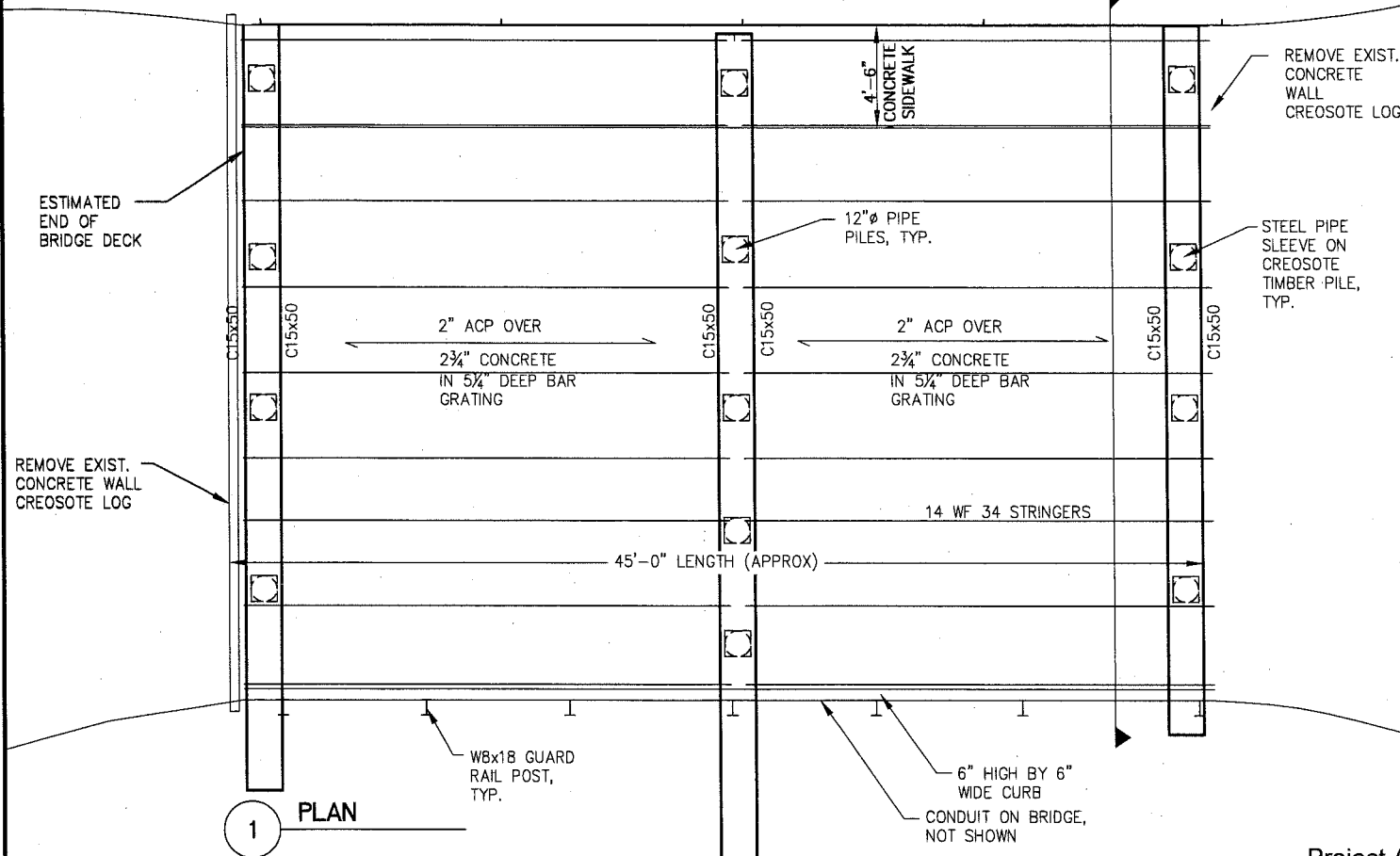
PROJECT DESIGNATION
69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012

SHEET NUMBER	TOTAL SHEETS
A4	29

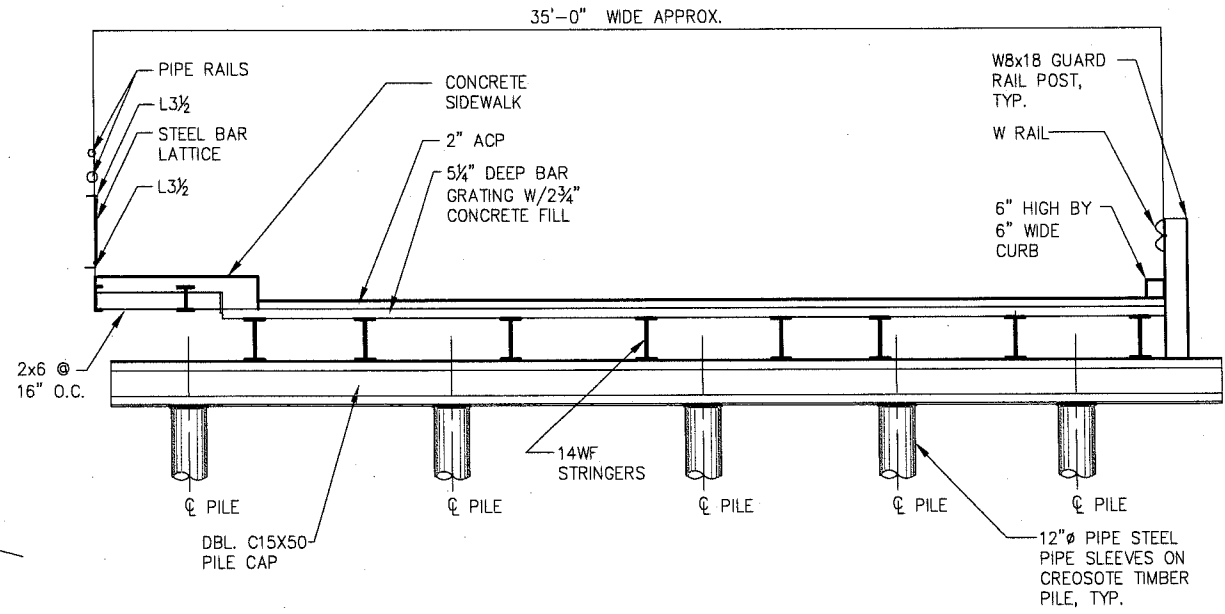


A EAST ELEVATION

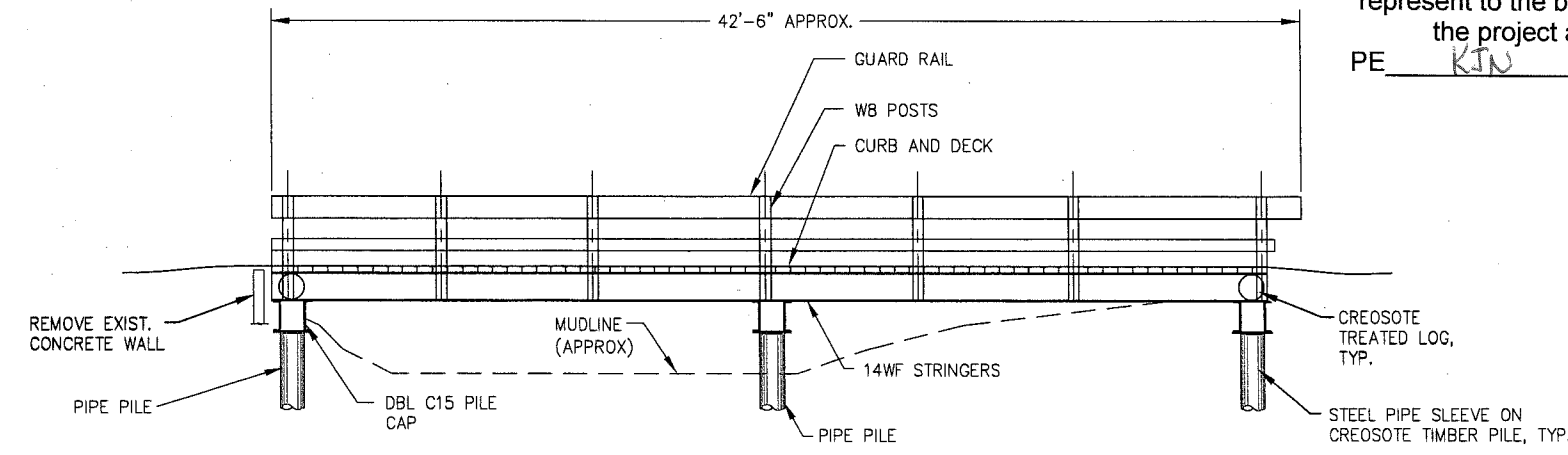


1 PLAN

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PE KTN Date 9/10/13



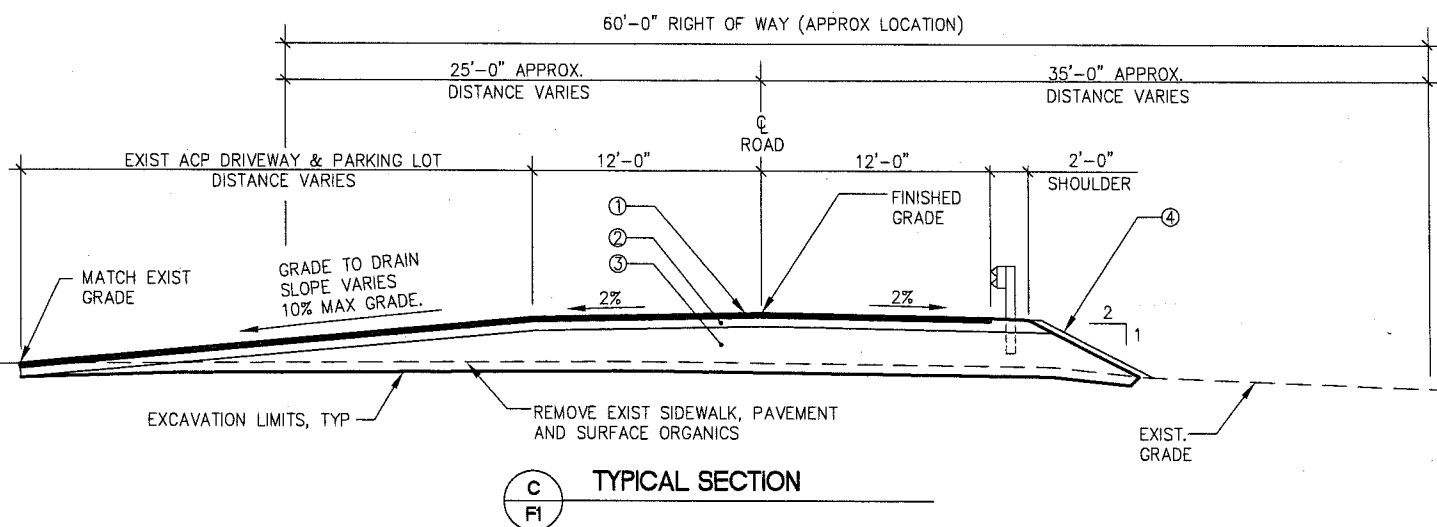
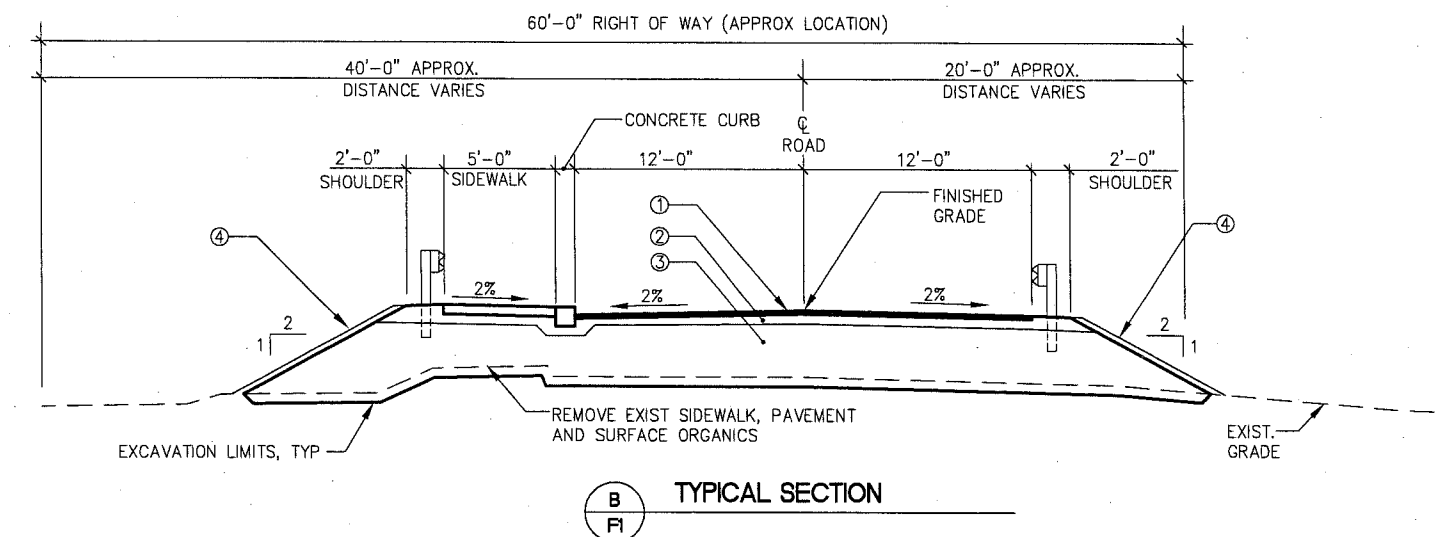
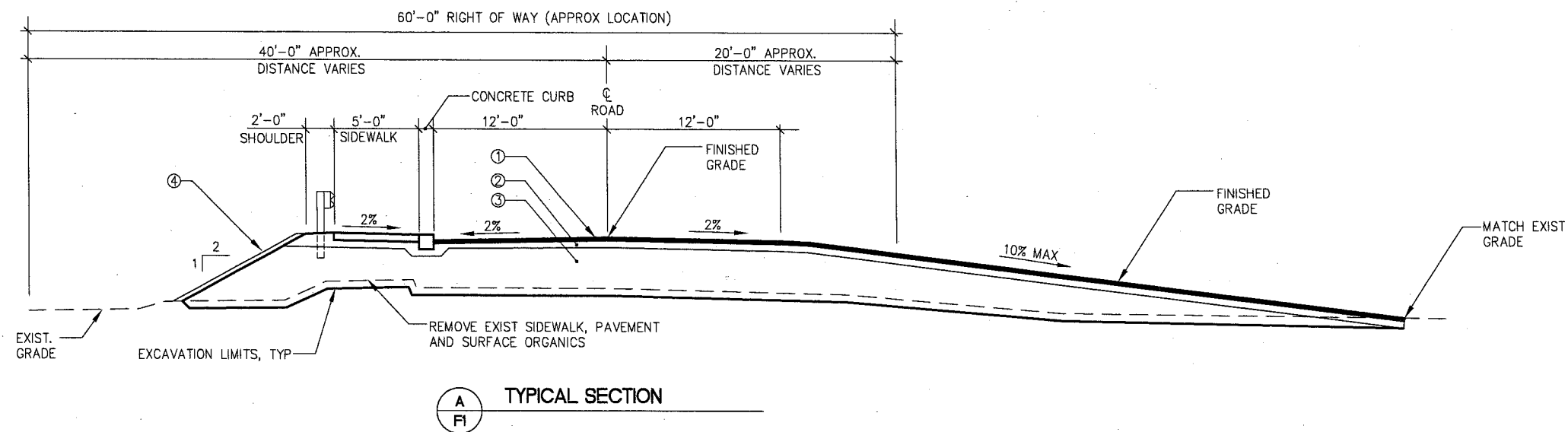
C TYPICAL SECTION



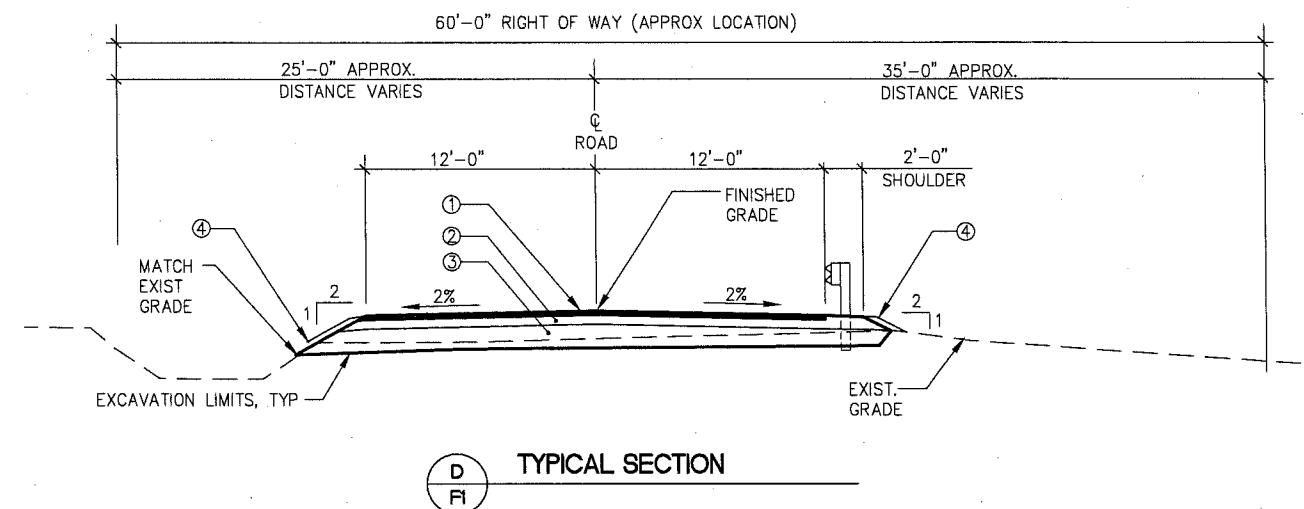
B WEST ELEVATION

- NOTES:
1. COATINGS ON PILES, STRINGERS, PILECAPS AND RAILINGS CONTAIN LEAD; HANDLE AND DISPOSE OF PER SPECIFICATIONS.
 2. DEMOLISH EXISTING BRIDGE INCLUDING RAILS, DECK, PILES, PILECAPS, STRINGERS, CREOSOTE LOGS, CONCRETE AT ABUTMENTS, CONDUIT ON BRIDGE AND ALL ELSE.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



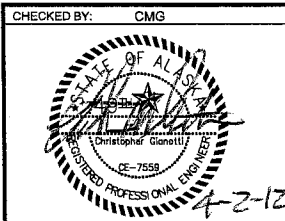
MATERIAL SCHEDULE	
SYMBOL	MATERIAL DESCRIPTION
①	2 1/4" ASPHALT CONCRETE, TYPE II, CLASS B
②	6" AGGREGATE BASE COURSE, GRADING D-1
③	BORROW, SELECTED MATERIAL, TYPE A (TO COMPETENT SUBGRADE)
④	4" TOPSOIL AND SEED



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PE KJN Date 9/10/13

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786**

TYPICAL ROAD SECTIONS

DESIGNED BY: NAM
DRAWN BY: NAM

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN03 CIVIL\B1.DWG
TAB: B1 Monday, April 02, 2012 4:32:29 PM LANCE GREER

NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
69561/AC-BR-0003(151)	2012	B1	29

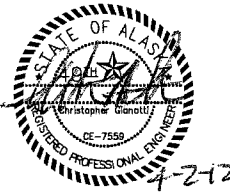
PLANS PREPARED BY
PND ENGINEERS, INC.

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
202 (13)	EXISTING BRIDGE REMOVAL	LUMP SUM	ALL REQ'D
203 (5)	BORROW, SELECTED MATERIAL, TYPE A	CUBIC YARD	750
203 (19)	UNCLASSIFIED EXCAVATION	LUMP SUM	ALL REQ'D
205 (5)	STREAM DIVERSION AND DEWATERING	LUMP SUM	ALL REQ'D
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	TON	324 300
401 (1)	ASPHALT CONCRETE, TYPE II, CLASS B	TON	133 125
401 (2)	ASPHALT CEMENT, GRADE PG 58-28	TON	7.5 6.6
501 (4)	CLASS A CONCRETE	LUMP SUM	ALL REQ'D
501 (7)	PRECAST CONCRETE MEMBERS - VOIDED DECK PLANKS	EACH	8
505 (5)	FURNISH STRUCTURAL STEEL PILES	LINEAR FOOT	900
505 (6)	DRIVE STRUCTURAL STEEL PILES	EACH	10
507 (6)	STEEL BRIDGE RAILINGS	LUMP SUM	ALL REQ'D
508 (1)	WATERPROOF MEMBRANE	LUMP SUM	ALL REQ'D
606 (1)	W-BEAM GUARDRAIL	LINEAR FOOT	157 132.2
608 (1A)	SIDEWALK, 6 INCHES THICK	SQUARE YARD	53 54
608 (6)	CURB RAMP	EACH	2
609 (2S)	CURB AND GUTTER, TYPE STANDARD	LINEAR FOOT	100 94.0
611 (1)	RIPRAP, CLASS I	CUBIC YARD	76.9 150
615 (7)	STANDARD SIGNS	LUMP SUM	ALL REQ'D.
618 (4)	SEEDING	LUMP SUM	ALL REQ'D.
620 (1)	TOPSOIL	SQUARE YARD	455 600
621 (2)	SHRUB (WILLOWS)	EACH	30 45
633 (2)	SILT BARRIER	LINEAR FOOT	300 440
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D.
641 (1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D.
641 (2)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	CONTINGENT SUM	\$3000
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D.
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D.
643 (29)	PUBLIC INFORMATION PROGRAM	LUMP SUM	ALL REQ'D.
644 (6)	VEHICLES	LUMP SUM	ALL REQ'D.
662 (1)	ELECTRICAL & COMMUNICATIONS CONDUIT	LUMP SUM	ALL REQ'D.
670 (1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQ'D.
505(11)	Load Test CO 1	Lump Sum	\$24,271.65
505(11a)	Load Test CO 2	Lump Sum	\$6,591.21
203(6)	Borrow CO3	TON	\$29,461.92
606(1a)	W-BEAM GUARDRAIL CO3	Lump Sum	\$17,585.50
202(13a)	Removal of Pavement CO 3	Lump Sum	\$9,770.19
202(11)	Removal of Structures & Obstructions CO 3	Lump Sum	\$28,309.44
503(1)	REINFORCING STEEL CO3	Lump Sum	\$1,883.80

BASIS OF ESTIMATE	
PAY ITEM	ESTIMATING FACTOR
REMOVAL OF PAVEMENT	750 SY (APPROX)
REMOVAL OF SIDEWALK	100 SY (APPROX)
AGGREGATE BASE COURSE, GRADING D-1	2.0 TON/CY
ASPHALT CONCRETE, TYPE II, CLASS B	125 LB/SY/IN
ASPHALT CEMENT, GRADE PG 58-28	6.0% OF ITEM 401 (1)
UNCLASSIFIED EXCAVATION	850 CY (APPROX)
CLASS A CONCRETE	90 CY (APPROX)
CONCRETE REINFORCEMENT @ ABUTMENT, WING WALLS, SIDEWALK AND PILES	10.7 TONS (APPROX)
CONCRETE FORM WORK	1500 SF (APPROX)
WATERPROOF MEMBRANE	1250 SF (APPROX)
STEEL BRIDGE RAILINGS	100 LF (APPROX)
SEEDING	600 SY (APPROX)
4"Ø SCH40 PVC ELECTRICAL & COMMUNICATIONS CONDUIT	246 LF (APPROX)
TYPE II JUNCTION BOX	1 EACH

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PE KJN Date 9/10/13

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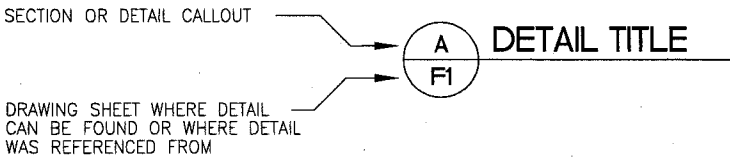
CHECKED BY: CMG		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
		JUNEAU BRIDGE REPAIR & UPGRADE TROUT STREET BRIDGE NO.1786	
DESIGNED BY: NAM		ESTIMATE OF QUANTITIES	
DRAWN BY: NAM			
PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN\3 CIVIL\1.DWG			
TAB: C1 Monday, April 02, 2012 4:32:25 PM LANCE GREER			
REVISIONS		PROJECT DESIGNATION	YEAR
NO.	DATE	DESCRIPTION	SHEET NO.
			TOTAL SHEETS
		69561/AC-BR-0003(151)	2012 C1 29

CIVIL GENERAL NOTES

1. MATCH EXISTING FINISH GRADES AT PROJECT LIMITS AND WHERE REQUIRED TO MATCH AT EXISTING ROADS.
2. ALL EXISTING ASPHALT CONCRETE MATERIALS TO BE REMOVED SHALL BE DISPOSED IN A LEGAL MANNER. ALL OTHER REMOVED MATERIALS THAT ARE NOT SUITABLE FOR REUSE ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND PROPERLY DISPOSED OF AT AN APPROVED SITE.
3. THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES MAY BE PRESENT HOWEVER ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY, PRIOR TO BEGINNING WORK. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITY COMPANIES PRIOR TO ANY/ ALL EXCAVATIONS AT THE FOLLOWING TELEPHONE NUMBERS:

DIAL BEFORE YOU DIG!
586-1333
UNDERGROUND POWER, TELEPHONE, T.V., WATER
AND SEWER LINES ARE IN THE AREA. UTILITIES SHOWN
HERE DO NOT SUBSTITUTE FOR FIELD LOCATES.

LEGEND




ABBREVIATIONS

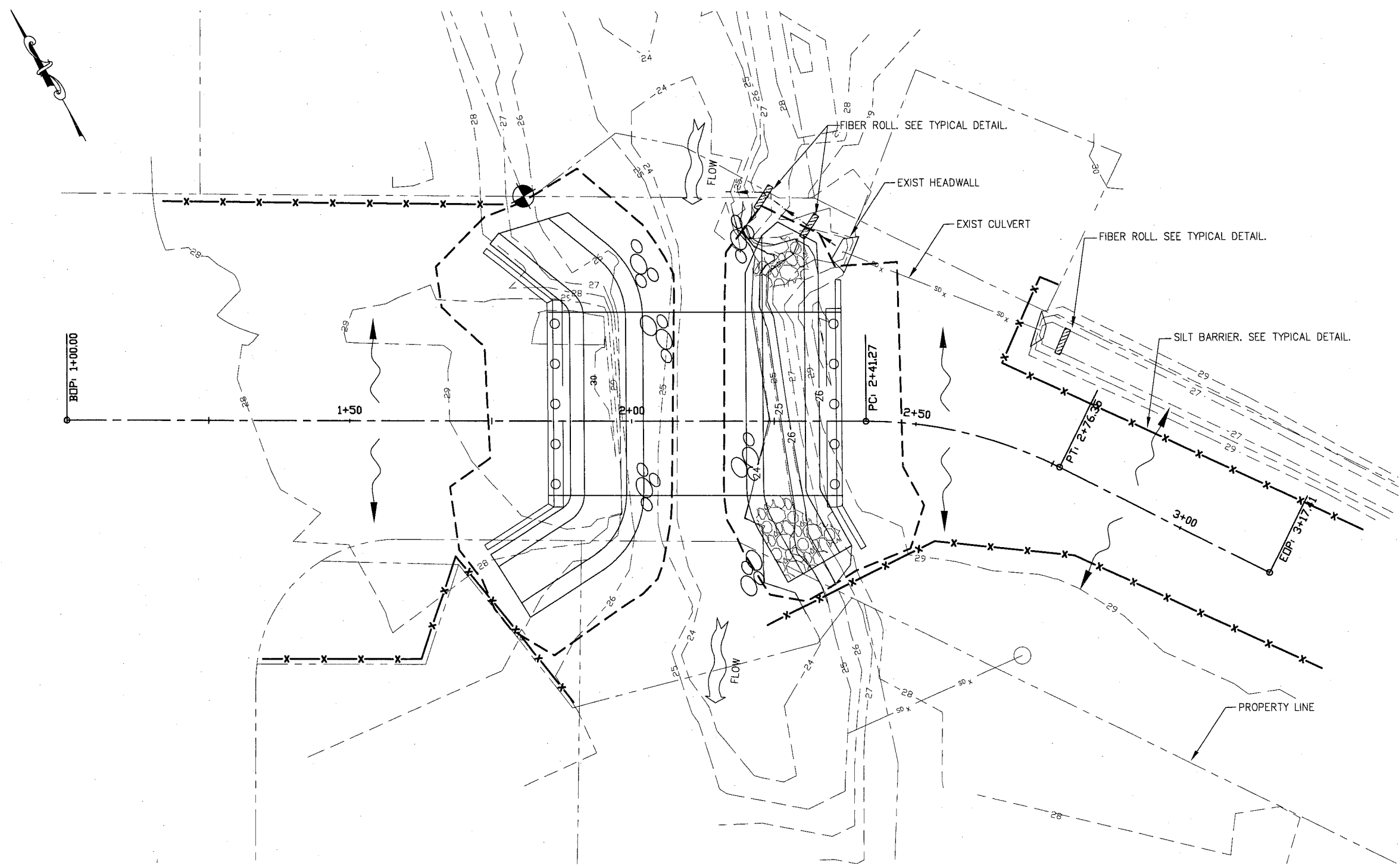
#	NUMBER	H/V	HORIZONTAL/VERTICAL	R	RADIUS
@	AT	HDG	HOT DIP GALVANIZED	RD	ROAD
ACP	ASPHALT CONCRETE PAVEMENT	H/ HORIZ	HORIZONTAL	RE	RIM ELEVATION
AKDOTPF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	HWY	HIGHWAY	REC	RECORDED
APPROX	APPROXIMATE	IE	INVERT ELEVATION	REQ'D	REQUIRED
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	IN	INCH	ROW	RIGHT OF WAY
AVE	AVENUE	JT	JOINT	RT	RIGHT
AWS	AMERICAN WELDING SOCIETY	KIPS	THOUSANDS OF POUNDS	S	SOUTH
B.O.B	BEGINNING OF BRIDGE	KSI	THOUSAND POUNDS PER SQUARE INCH	SDMH	STORM DRAIN MANHOLE
BOP	BEGINNING OF PROJECT	L	LENGTH	SPEC	SPECIFICATION
BTM	BOTTOM	LB	POUND	SSMH	SANITARY SEWER MANHOLE
BTWN	BETWEEN	LF	LINEAR FOOT	ST	STREET
BVCE	BEGIN VERTICAL CURVE ELEVATION	LHC	LENGTH OF HORIZONTAL CURVE	STA	STATION
BVCS	BEGIN VERTICAL CURVE STATION	LS	LUMP SUM	STD	STANDARD
CBJ	CITY AND BOROUGH OF JUNEAU	LT	LEFT	SY	SQUARE YARD
C.I.P	CAST IN PLACE	LVC	LENGTH OF VERTICAL CURVE	SYMM	SYMMETRIC
CJ	CONSTRUCTION JOINT	MAX	MAXIMUM	t	THICKNESS
C	CENTERLINE	MEAS	MEASURED	T&B	TOP AND BOTTOM
CLR	CLEAR	MAT'L	MATERIAL	TBM	TEMPORARY BENCHMARK
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	TYP	TYPICAL
CONC	CONCRETE	MLLW	MEAN LOWER LOW WATER	UNO	UNLESS NOTED OTHERWISE
COR	CORNER	N	NORTH	V	VERTICAL
CTRD	CENTERED	NFS	NON-FROST SUCCEPTIBLE	VC	VERTICAL CURVE
CTRL	CONTROL	NO	NUMBER	W	WEST
CY	CUBIC YARD	MAX	MAXIMUM	W/	WITH
d	DEPTH	MIN	MINIMUM	X-STRG	EXTRA STRONG
DHW	DESIGN HIGH WATER	NO	NUMBER		
DIA	DIAMETER	OC	ON CENTER		
E	EAST	OD	OUTSIDE DIAMETER		
EA	EACH	OFF	OFFSET		
EG	EXISTING GRADE	OHWM	ORDINARY HIGH WATER MARK		
ELEV	ELEVATION	O.O.	OUT TO OUT		
E.O.B.	END OF BRIDGE	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION		
EOP	END OF PROJECT	OWS	OIL/WATER SEPARATOR		
EVCE	END VERTICAL CURVE ELEVATION	PC	POINT OF CURVATURE		
EXIST	EXISTING	PND	PND ENGINEERS, INC.		
EXP	EXPANSION	PL	PLATE		
FT	FEET	PSI	POUNDS PER SQUARE INCH		
FG	FINISH GRADE	PT	POINT		
Fy	YIELD STRESS	PVI	POINT OF VERTICAL INTERSECTION		
g	ACCELERATION DUE TO GRAVITY				
GALV.	GALVANIZED				

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

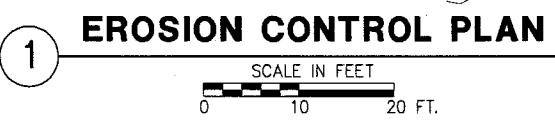
PE KJN Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: CMG		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
		JUNEAU BRIDGE REPAIR & UPGRADE TROUT STREET BRIDGE NO.1786	
DESIGNED BY: NAM		LEGEND AND ABBREVIATIONS	
DRAWN BY: NAM			
PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PNDS CIVIL\D1.DWG			
TAB: D1 Monday, April 02, 2012 4:32:21 PM LANCE GREER			
REVISIONS		PROJECT DESIGNATION	YEAR
NO.	DATE	DESCRIPTION	SHEET NO.
			69561/AC-BR-0003(151)
			2012
			D1
			TOTAL SHEETS
			29



- NOTES:
1. SEE SHEET E2.0-E4.0 FOR DEWATER AND DIVERSION PLANS. CONTRACTOR SHALL SUBMIT DEWATERING AND DIVERSION PLAN FOR ENGINEER'S REVIEW AND APPROVAL.
 2. ALL TEMPORARY STRUCTURES INCLUDING, STREAM DIVERSION MATERIALS , SILT FENCING AND FIBER ROLLS SHALL BE REMOVED FOLLOWING CONSTRUCTION.
 3. THE CONTRACTOR SHALL PROTECT EXISTING STORMDRAIN INLETS FROM POLLUTED RUNOFF WITH FILTERING GEOTEXTILE OR SILT BARRIER.
 4. SEE STANDARD DETAIL E-13.00 SEDIMENT CONTROL SYSTEM FOR IN-WATER INSTALLATIONS.
 5. TEMPORARY COMMUNICATION CONDUIT AND CABLE, SEE SHEET U1.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KJN Date 9/10/13

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PNDS\CIVIL\1-E5.DWG

LANCE GREER

TAB: E1 Monday, April 02, 2012 4:31:53 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

X-X

SILT BARRIER

—

SWALE

FIBER ROLL

ABUTMENT

PILE

LIMITS OF EXCAVATION

SURFACE RUNOFF

—26—

FG CONTOURS

- - -26 - - -

EG CONTOURS

PLAN LEGEND

CHECKED BY: CMG

PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

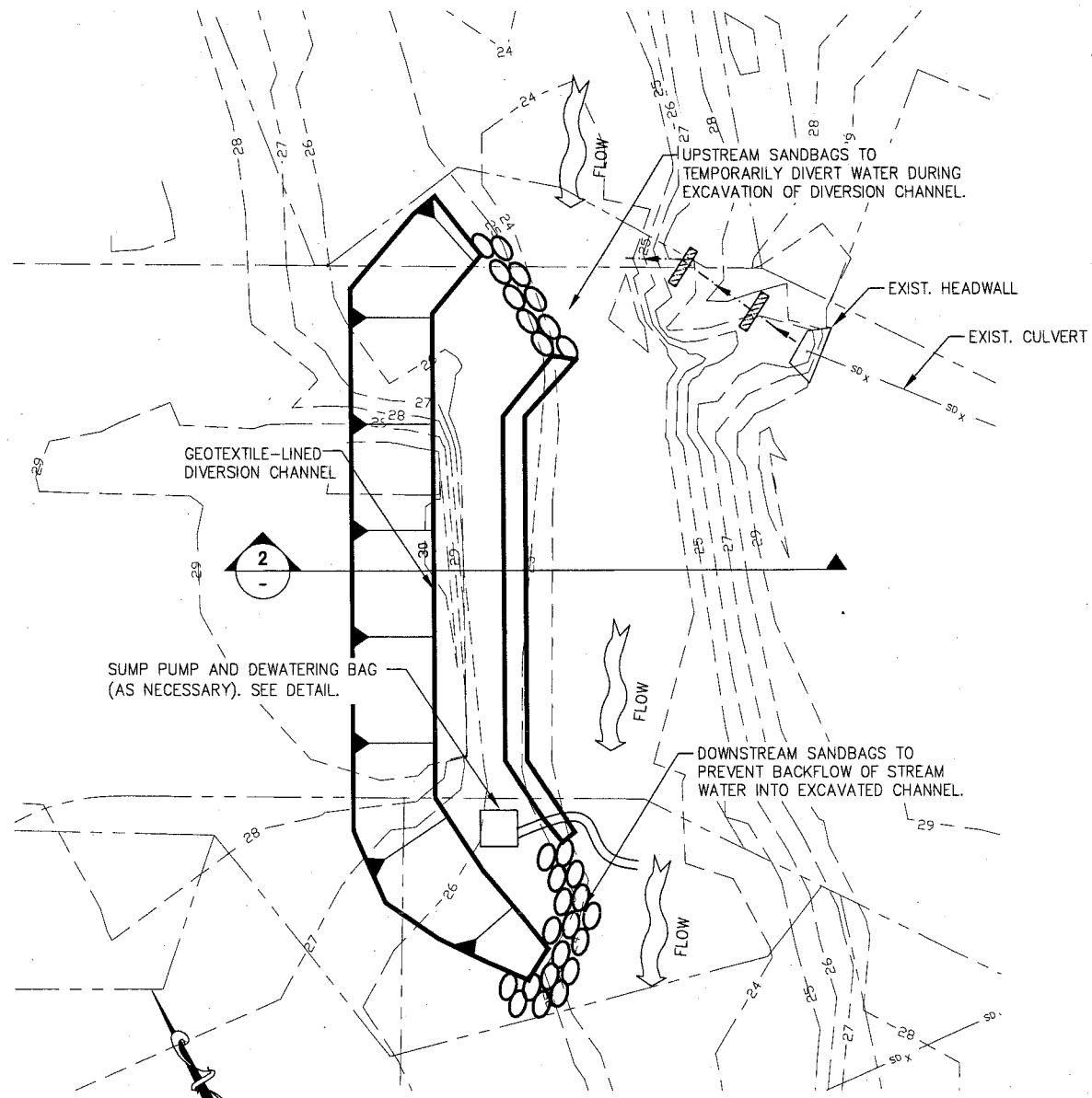
EROSION CONTROL
PLAN

PROJECT DESIGNATION

69561/AC-BR-0003(151)

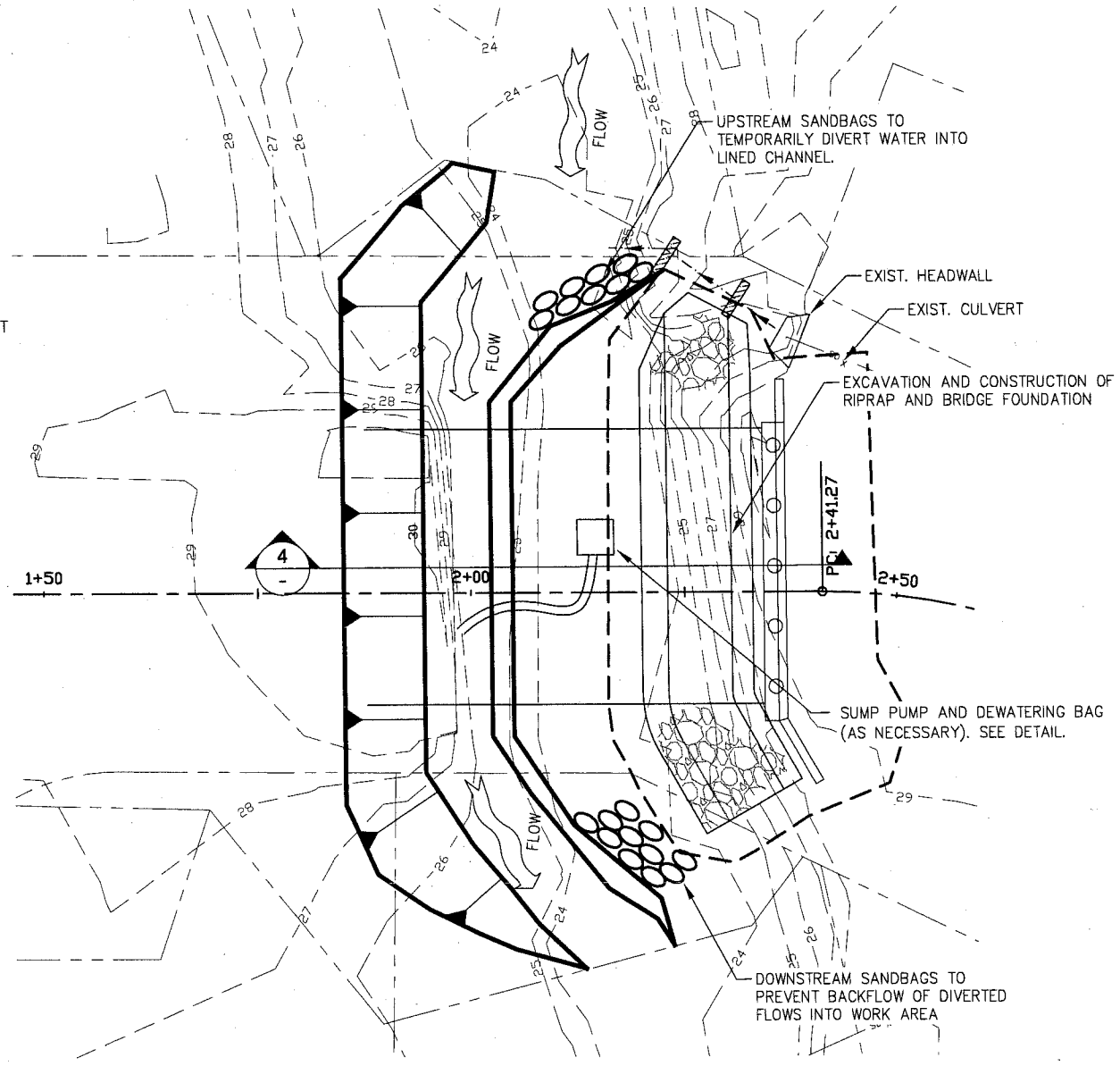
STATE	YEAR
ALASKA	2012
SHEET NUMBER	TOTAL SHEETS
E1	29

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



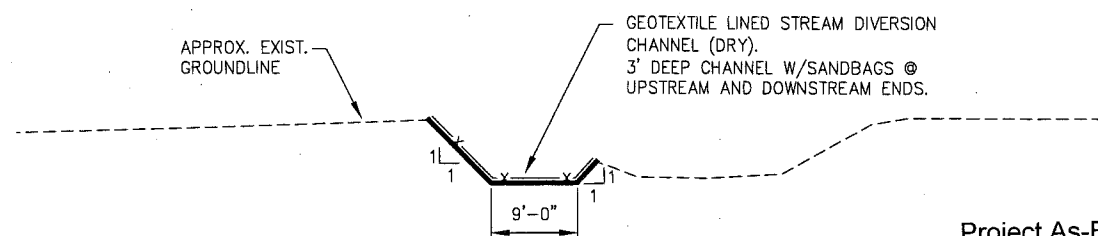
PLAN-PHASE 1

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PLAN-PHASE 2

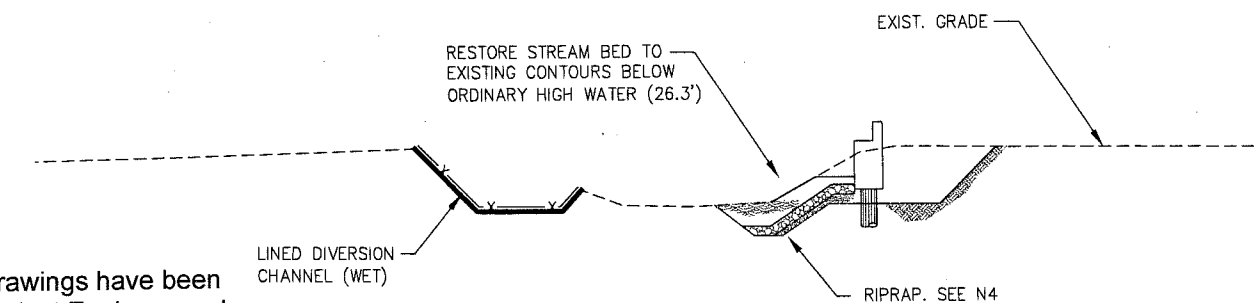
SCALE IN FEET
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SECTION-PHASE 1

SCALE IN FEET
0 10 20 FT.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE KJN Date 9/10/13



SECTION-PHASE 2

SCALE IN FEET
0 10 20 FT.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN\3 CIVIL\1-E5.DWG
LANCE GREER
TAB: E2 Monday, April 02, 2012 4:31:58 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CUTSLOPE TICK MARKS

SANDBAGS

PROPERTY LINE

STREAM FLOW DIRECTION

EXIST. CONTOURS

FG CONTOURS

PLAN LEGEND

CHECKED BY: CMG

PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

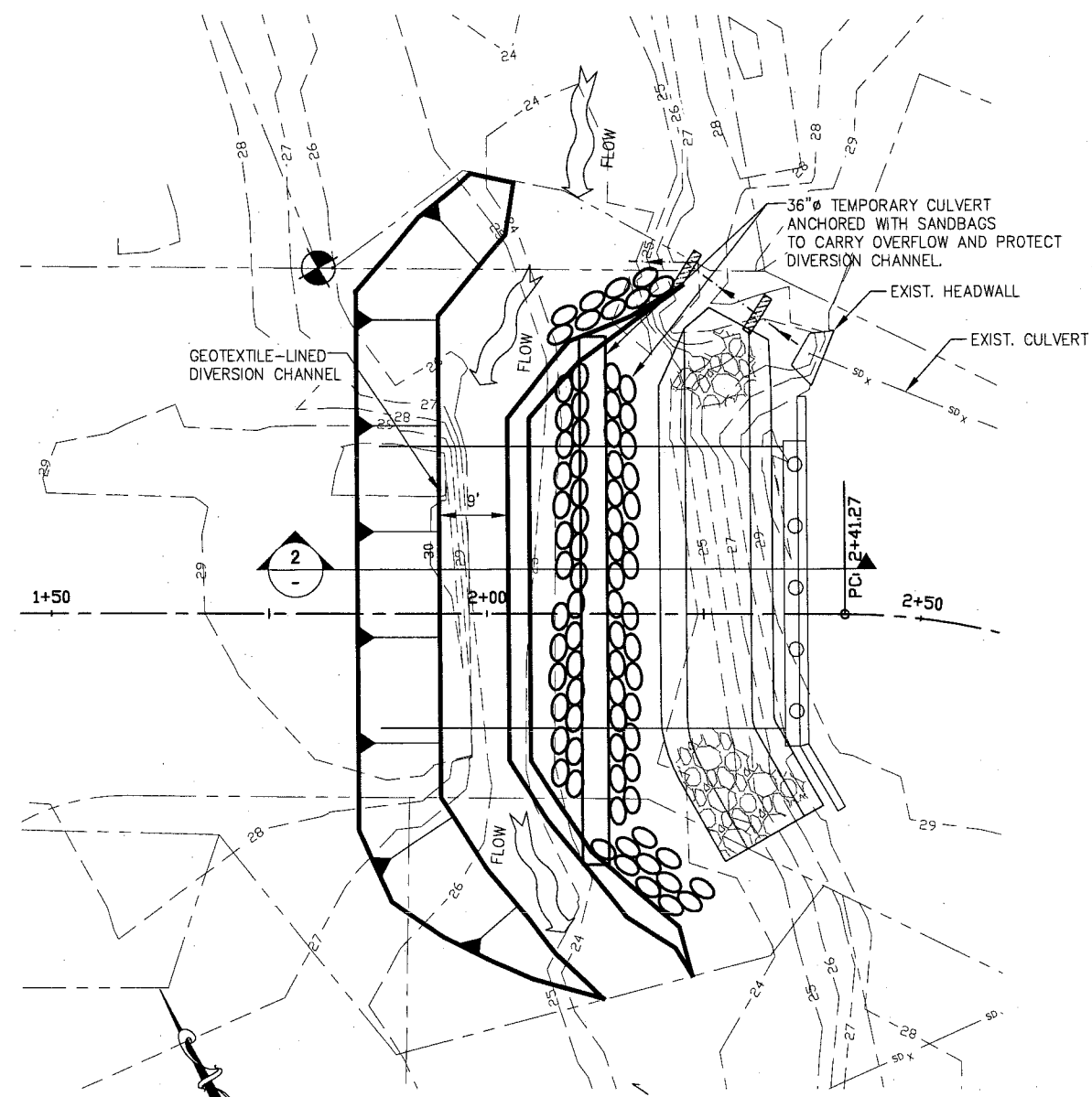
**JUNEAU BRIDGE REPAIR & UPGRADE
TROUT STREET BRIDGE
NO. 1786**

DIVERSION AND DEWATERING PLAN

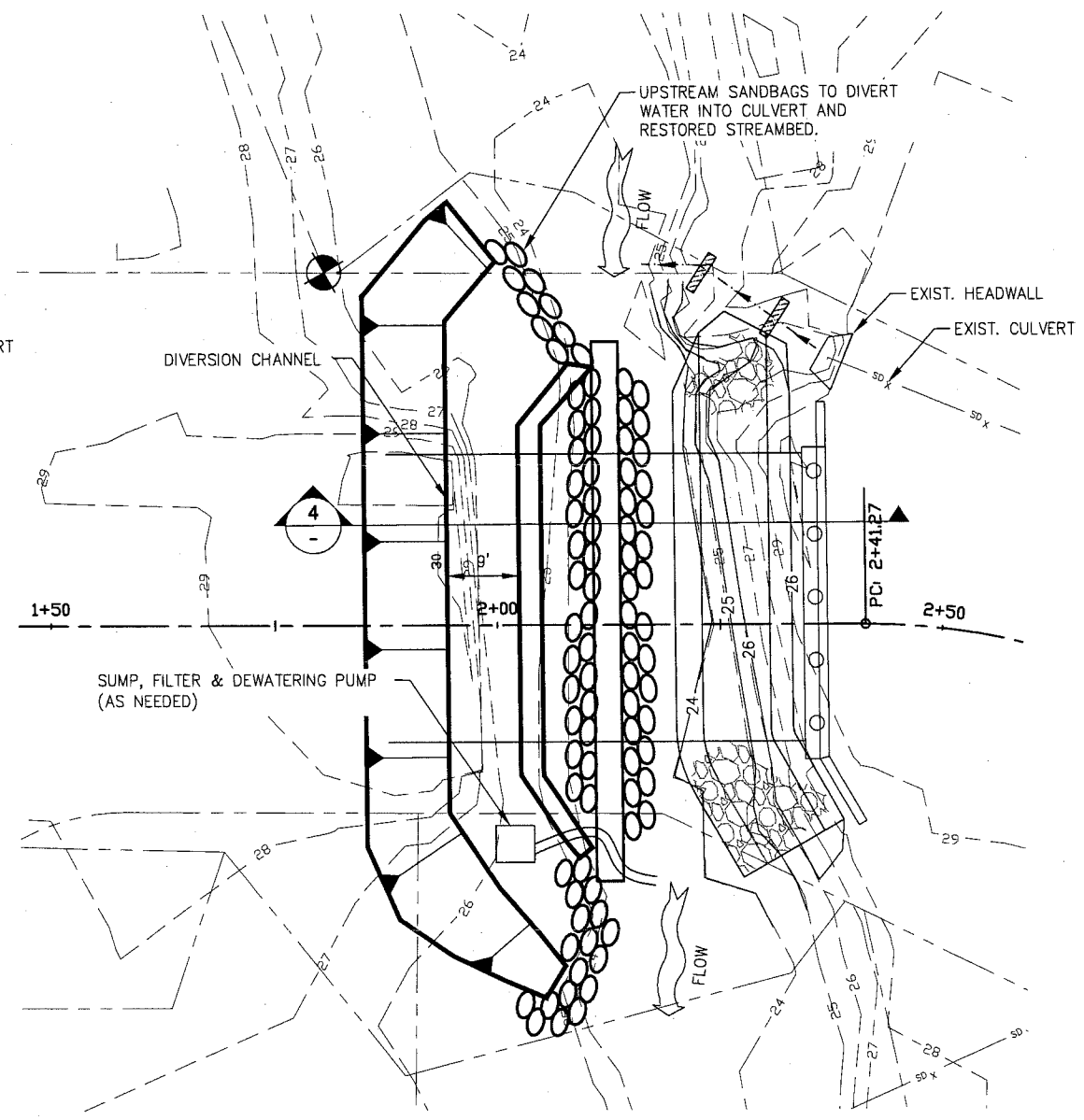
PROJECT DESIGNATION
69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012

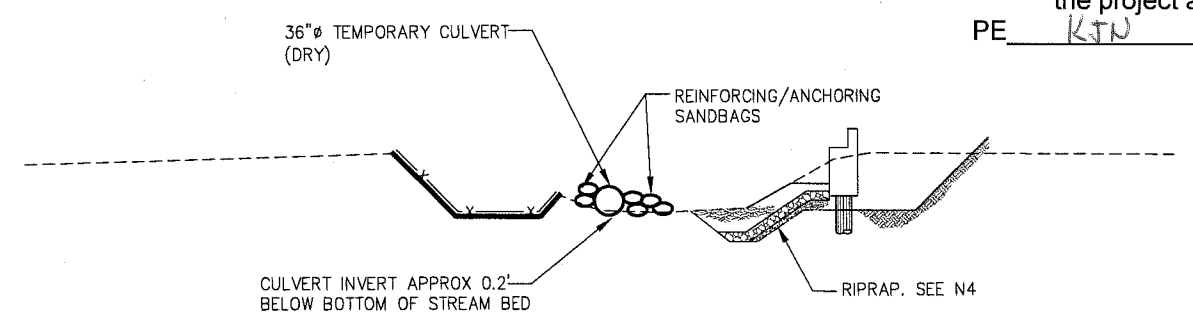
SHEET NUMBER	TOTAL SHEETS
E2	29



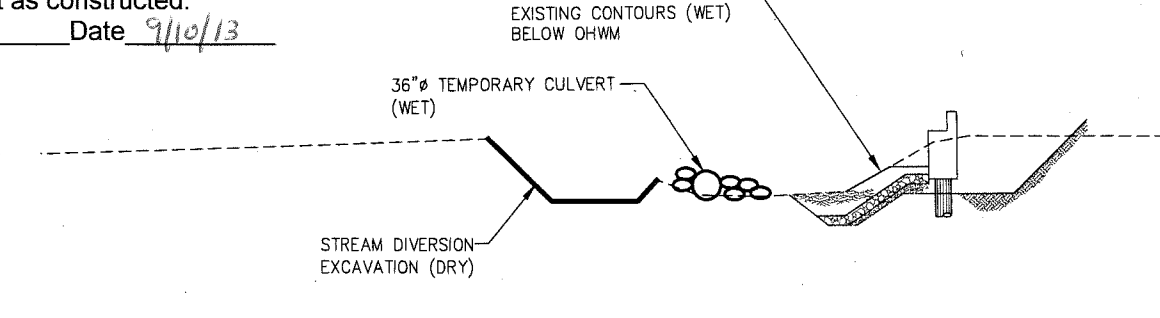
1 PLAN-PHASE 3
SCALE IN FEET
0 10 20 FT.



3 PLAN-PHASE 4
SCALE IN FEET
0 10 20 FT.



2 SECTION-PHASE 3
SCALE IN FEET
0 10 20 FT.



4 SECTION-PHASE 4
SCALE IN FEET
0 10 20 FT.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE KTN Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN03 CIVIL\1-E5.DWG
LANCE GREER
TAB: E3 Monday, April 02, 2012 4:32:03 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

SANDBAGS
 PROPERTY LINE
 FLOW DIRECTION
 FLOW
 EXIST. CONTOURS
 FG CONTOURS

PLAN LEGEND

CHECKED BY: CMG

PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR & UPGRADE
TROUT STREET BRIDGE
NO. 1786**







DIVERSION AND DEWATERING PLAN

PROJECT DESIGNATION
69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012

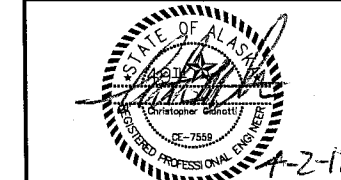
SHEET NUMBER	TOTAL SHEETS
E3	29

No.	DATE	DESCRIPTION

-  SANDBAGS
-  PROPERTY LINE
-  FLOW DIRECTION
-  FLOW
-  EXIST. CONTOURS
-  FG CONTOURS

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION

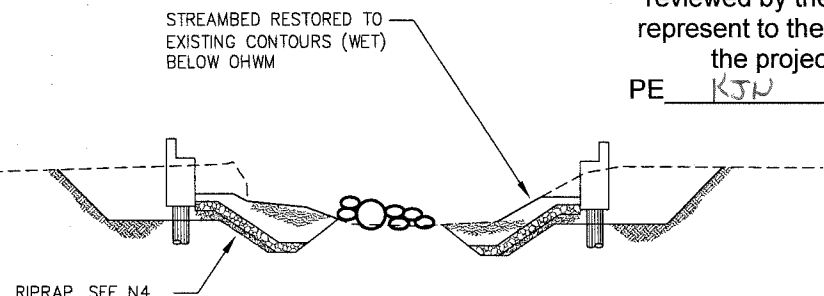
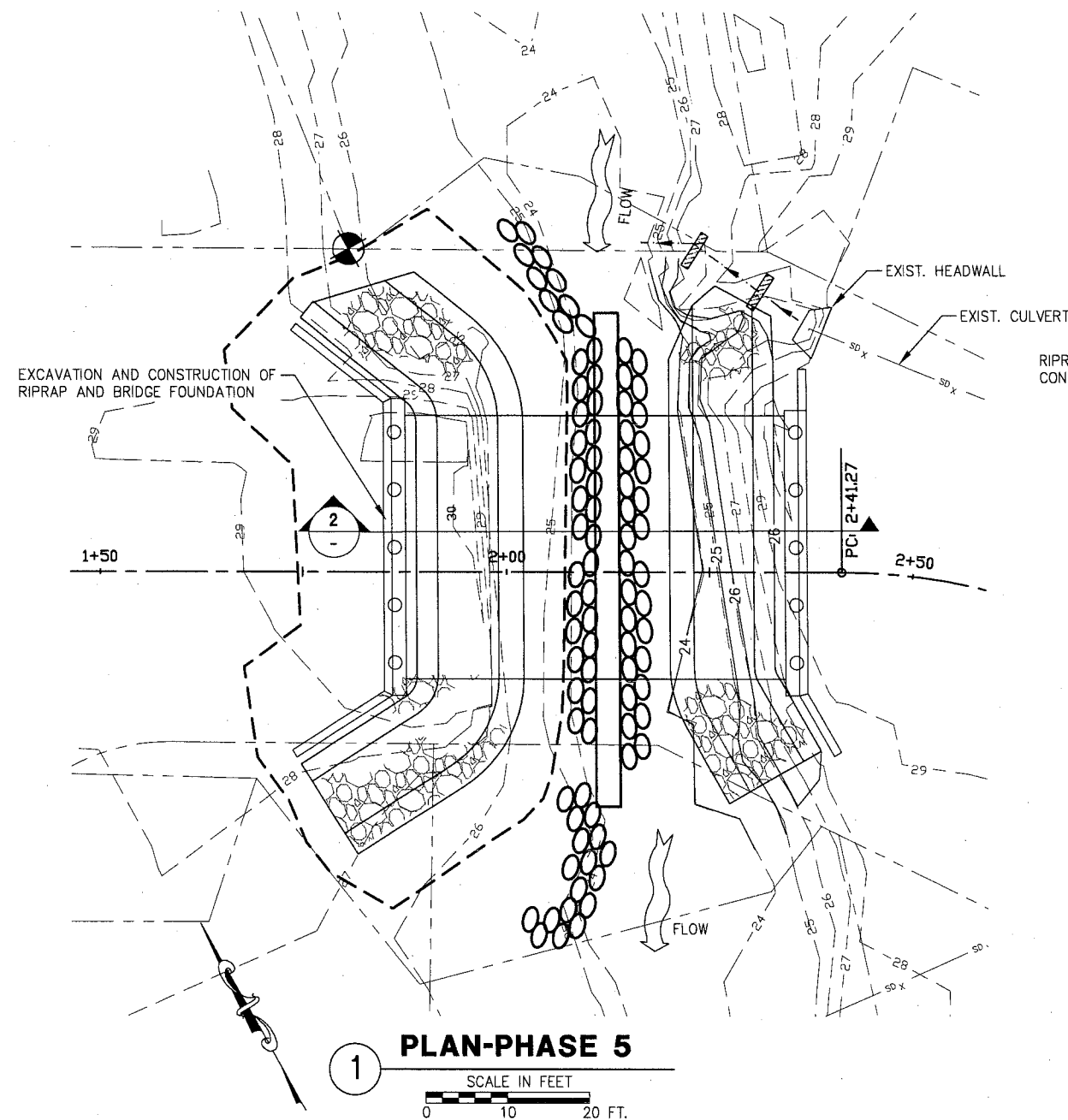
**JUNEAU BRIDGE REPAIR
 & UPGRADE
 TROUT STREET BRIDGE
 NO.1786**

**DIVERSION AND DEWATERING
 PLAN**

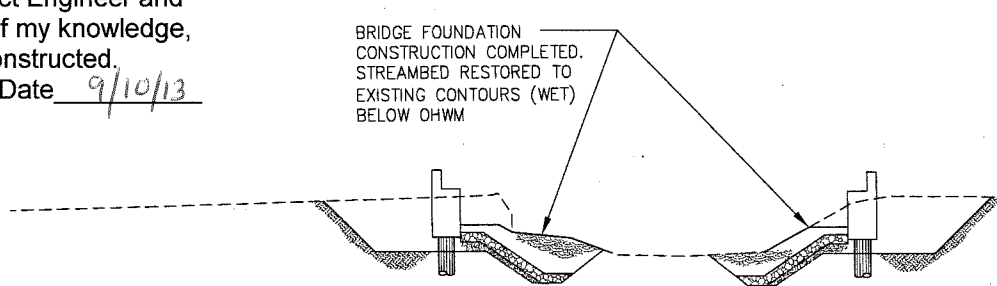
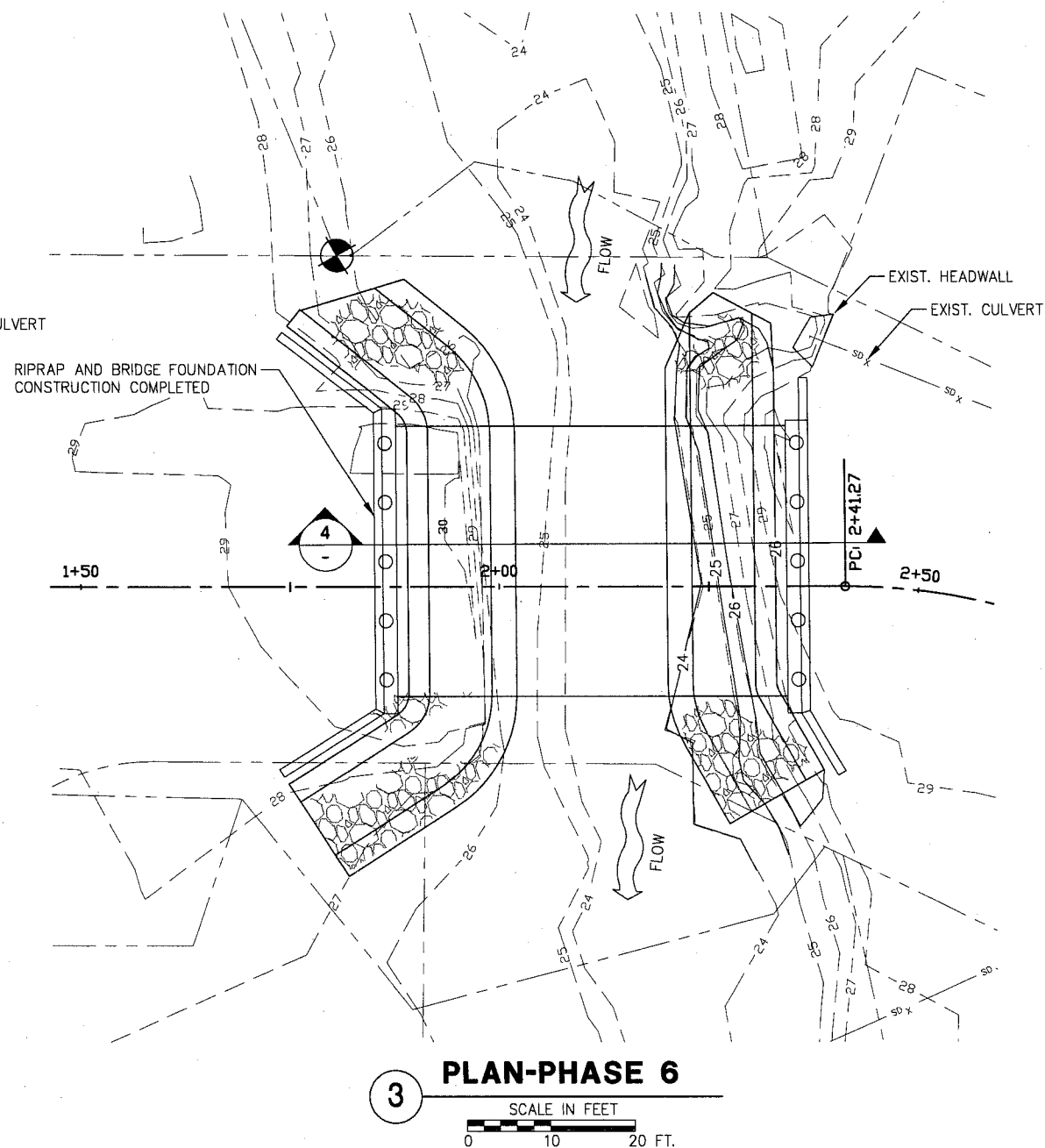
PROJECT DESIGNATION
69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012

SHEET NUMBER	TOTAL SHEETS
E4	29

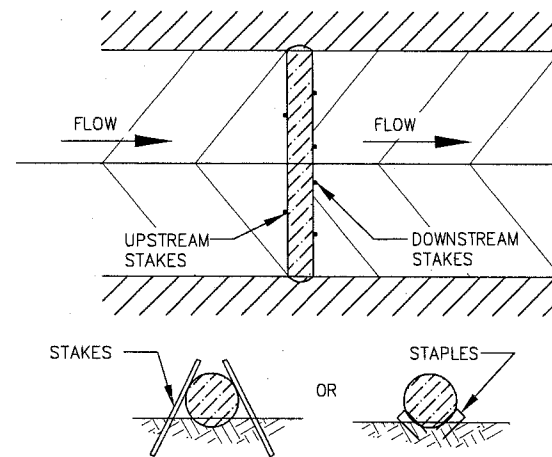


Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE KJP Date 9/10/13



NOTE: ALL EROSION AND SEDIMENT CONTROLS AND STREAM DIVERSION CONTROLS REMOVED FROM STREAMBED IMMEDIATELY FOLLOWING CONSTRUCTION AND RESTORATION OF ORIGINAL STREAM BED FLOWS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

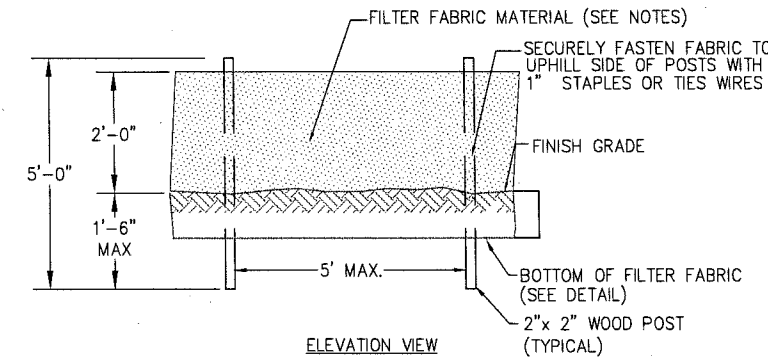


NOTES:

1. USE A MINIMUM 12" DIAMETER FIBER ROLL.
2. USE 2" WOODEN STAKES W/2"x2" NOMINAL CROSS SECTION.
3. ONLY INSTALL FIBER ROLL TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND FIBER ROLL AND SCOUR DITCH.
4. INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE THE WATTLE TO THE DITCH BOTTOM.
5. PROVIDE STAPLES MADE OF 1/8" WIRE FORMED INTO U-SHAPE 12" IN LENGTH.
6. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF FIBER ROLL AND AT EACH END TO SECURE IT TO THE SOIL.

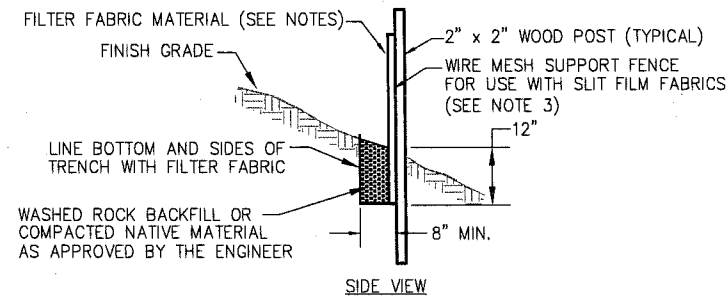
FIBER ROLL

1



NOTES:

1. FILTER FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL OF FABRIC. JOINTS SHALL BE KEPT TO A MINIMUM. JOINTS SHALL BE AT SUPPORT POSTS WITH A MINIMUM OF 6" OVERLAP.
2. FILTER FABRIC TYPE SHALL BE APPROVED BY THE ENGINEER.
3. MORE SUPPORT POSTS MAY BE SUBSTITUTED FOR WIRE MESH AS APPROVED BY THE ENGINEER.
4. FILTER FABRIC FENCE SHALL BE REMOVED AFTER UPSLOPE HAS BEEN STABILIZED. RETAINED MATERIALS SHALL BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.
5. SILT BARRIER SHALL CONFORM TO STD DRAWING E-13.00, UNLESS OTHERWISE NOTED.



SILT BARRIER

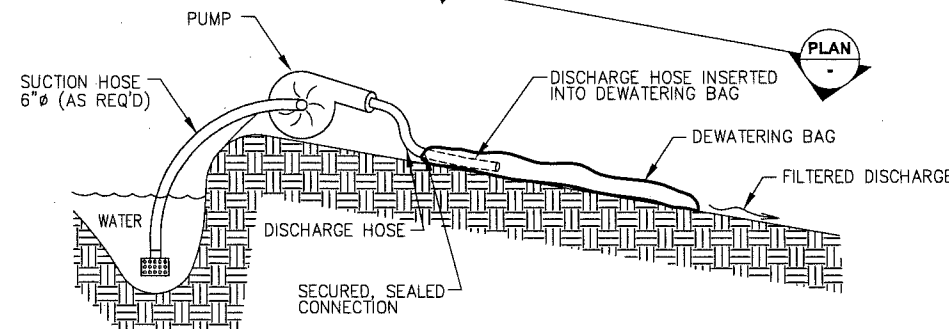
2

NOTES:

1. SANDBAGS SHALL BE 14"x26" POLYPROPYLENE, OR COMPARABLE, AS APPROVED BY THE ENGINEER.
2. SANDBAGS SHALL BE PLACED TIGHTLY.
3. SANDBAG BARRIERS SHALL BE A MINIMUM OF 3 BAGS HIGH.
4. THE END OF THE BARRIER SHALL BE TURNED UPSLOPE WHERE APPLICABLE.
5. SANDBAG ROWS AND LAYERS SHALL BE STAGGERED TO ELIMINATE GAPS.

SAND BAG

3



SECTION

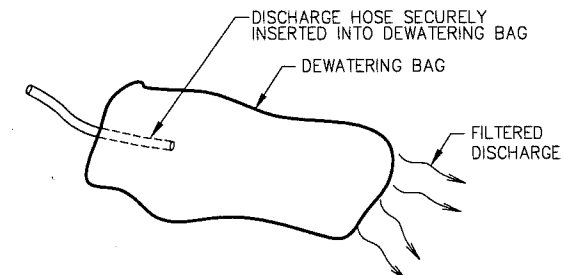
NOTES:

1. DEWATERING BAG SHALL BE NONWOVEN, POLYPROPYLENE GEOTEXTILE WITH THE FOLLOWING MINIMUM SPECIFICATIONS:

PROPERTY	TEST METHOD	MARV
TENSILE GRAB STRENGTH	ASTM D-4632	270 LBS
ELONGATION	ASTM D-4632	50%
PUNCTURE	ASTM D-4833	165 LBS
MULLEN BURST	ASTM D-3786	525 PSI
TRAPEZOIDAL TEAR	ASTM D-4533	100 LBS
UV RESISTANCE	ASTM D-4355	70%
APPARENT OPENING SIZE	ASTM D-4751	100 SIEVE
PERMITTIVITY	ASTM D-4491	0.94 SEC^-1
WATER FLOW RATE	ASTM D-4491	75GPM/SQFT

SUMP PUMP W/DEWATERING BAG

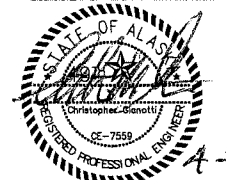
4



DISCHARGE BAG PLAN

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786**

**EROSION CONTROL & DIVERSION
AND DEWATERING DETAILS**

PROJECT DESIGNATION

69561/AC-BR-0003(151)

STATE YEAR
ALASKA 2012

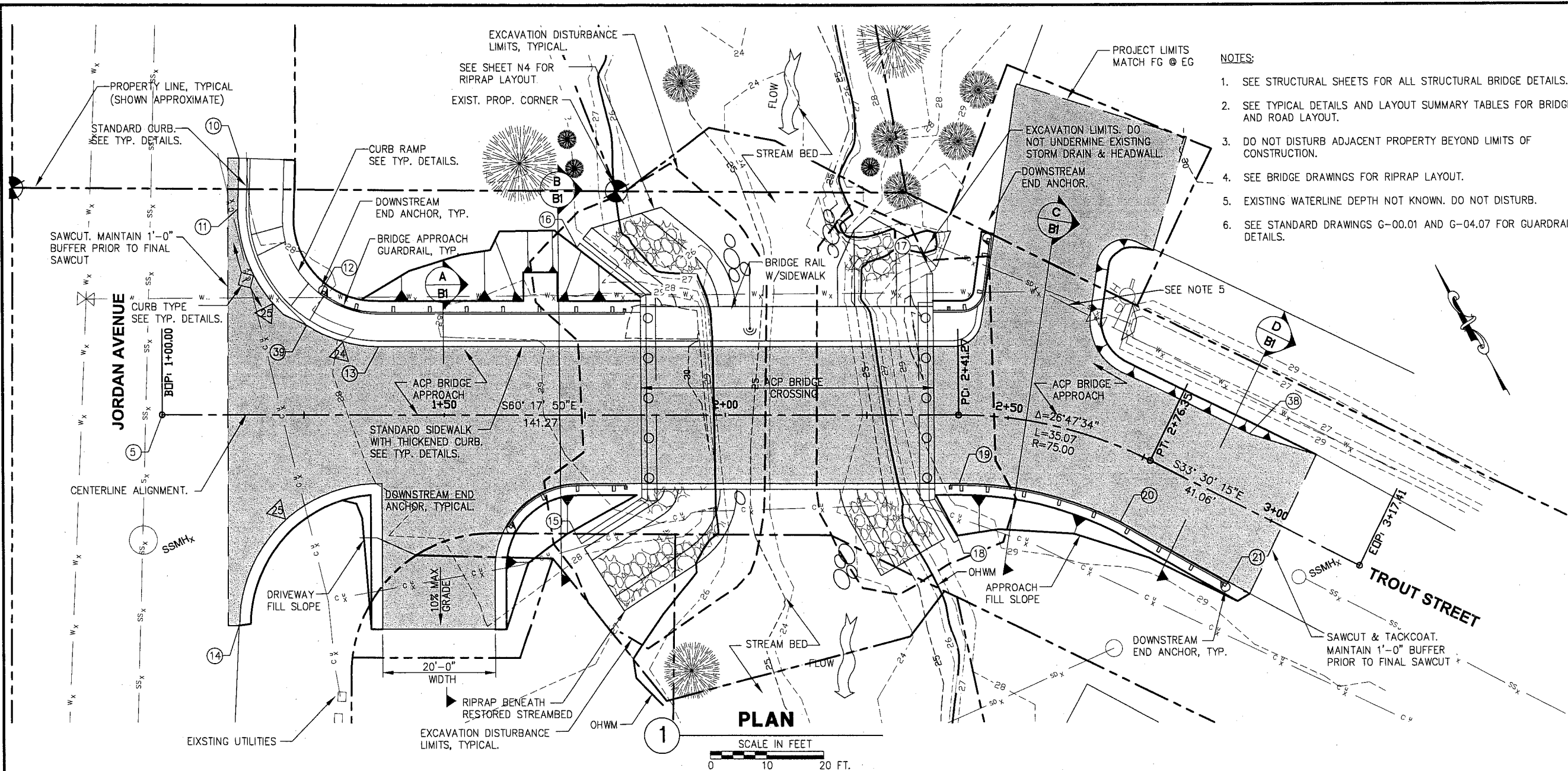
SHEET NUMBER TOTAL SHEETS

E5 29

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KTN Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



- NOTES:
1. SEE STRUCTURAL SHEETS FOR ALL STRUCTURAL BRIDGE DETAILS.
 2. SEE TYPICAL DETAILS AND LAYOUT SUMMARY TABLES FOR BRIDGE AND ROAD LAYOUT.
 3. DO NOT DISTURB ADJACENT PROPERTY BEYOND LIMITS OF CONSTRUCTION.
 4. SEE BRIDGE DRAWINGS FOR RIPRAP LAYOUT.
 5. EXISTING WATERLINE DEPTH NOT KNOWN. DO NOT DISTURB.
 6. SEE STANDARD DRAWINGS G-00.01 AND G-04.07 FOR GUARDRAIL DETAILS.

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PNDS CIVIL\F1.DWG

LANCE GREER
TAB: F1 Monday, April 02, 2012 4:31:48 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

AC PAVEMENT

EDGE OF ACP

RADIUS

LAYOUT POINT

GUARD RAIL

RIPRAP, SEE SHEET N4

ROCK CLUSTERS, SEE SHEET. N4

EXIST. HYDRANT

CURB TYPE

PLAN LEGEND

CHECKED BY: CMG

PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR & UPGRADE
TROUT STREET BRIDGE
NO.1786

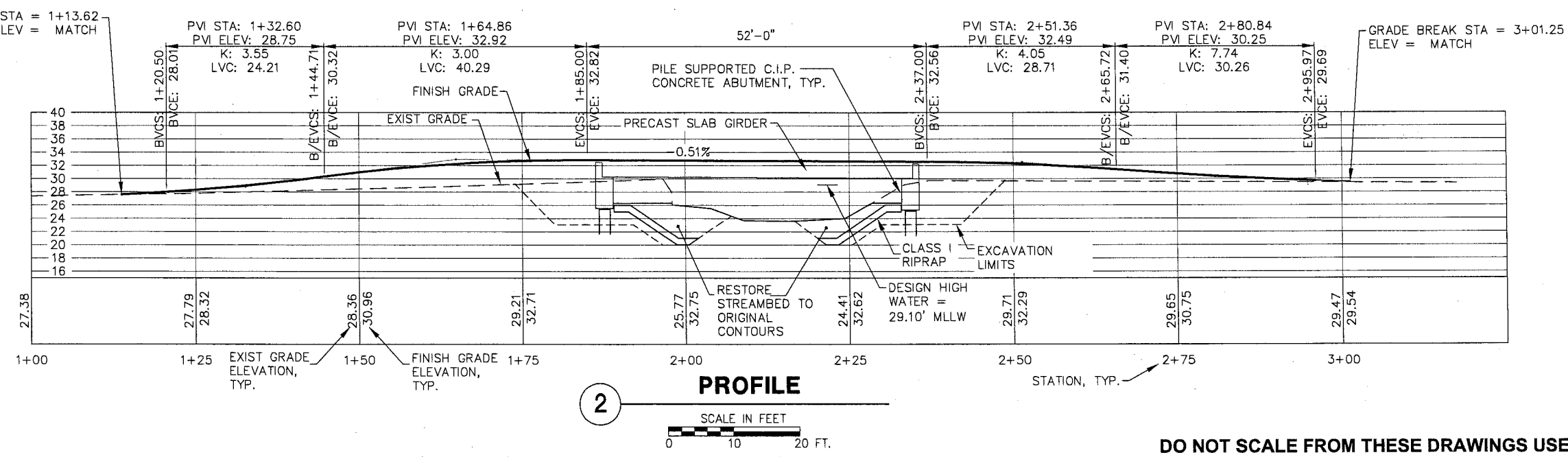
TROUT STREET
PLAN AND PROFILE

PROJECT DESIGNATION

69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012

SHEET NUMBER	TOTAL SHEETS
F1	29



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KTN Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ROAD LAYOUT					
POINT	STATION	OFFSET (FT)		ELEV.	DESCRIPTION
		LEFT	RIGHT		
⑤	TROUT STREET 1+00.00	0			☉ BP, N=5505.30, E=5177.61
⑥	TROUT STREET 3+17.41	0		-	☉ EP, N=5377.31, E=5348.36
⑩	TROUT STREET 1+13.67	44.90		MATCH	CORNER ACP
⑪	TROUT STREET 1+14.80	36.00		-	PC, ACP/BEGIN STD CURB
⑫	TROUT STREET 1+28.00	21.15		-	GUARDRAIL END TERMINAL
⑬	TROUT STREET 1+38.39	12.00		-	PT, ACP
⑭	TROUT STREET 1+13.39		37.00	MATCH	PC, ACP
⑮	TROUT STREET 1+73.65		21.60	-	BACK CORNER, ABUT WINGWALL
⑯	TROUT STREET 1+73.70	29.30		-	BACK CORNER, ABUT WINGWALL
⑰	TROUT STREET 2+37.00	24.65		-	BACK CORNER, ABUT WINGWALL
⑱	TROUT STREET 2+41.20		21.85		BACK CORNER, ABUT WINGWALL
⑲	TROUT STREET 2+41.30		12.00	-	PC, ACP
⑳	TROUT STREET 2+76.35		12.00	-	PT, ACP
㉑	TROUT STREET 2+98.00		13.00	-	GUARDRAIL END TERMINAL
㉒	TROUT STREET 1+38.80		12.00	-	PT/CORNER, ACP
㉓	TROUT STREET 1+38.80		37.50	MATCH	CORNER ACP
㉔	TROUT STREET 1+58.80		37.50	MATCH	CORNER ACP
㉕	TROUT STREET 1+58.80		27.00	-	PC, ACP
㉖	TROUT STREET 1+60.90		19.60	-	GUARDRAIL END TERMINAL
㉗	TROUT STREET 1+73.80		12.00	-	PC, ACP
㉘	TROUT STREET 2+40.50	12.00		-	PC, ACP
㉙	TROUT STREET 2+44.50	16.30		-	PT, ACP
㉚	TROUT STREET 2+45.00	21.50		-	PT, GUARDRAIL
㉛	TROUT STREET 2+45.80	31.00		-	GUARDRAIL END TERMINAL
㉜	TROUT STREET 2+47.50	58.40		MATCH	COR, ACP
㉝	TROUT STREET 2+65.40	55.20		MATCH	COR, ACP
㉞	TROUT STREET 2+65.30	34.40		MATCH	PC, ACP
㉟	TROUT STREET 2+59.50	29.50		-	PT, ACP
㊱	TROUT STREET 2+60.00	20.85		-	PC, ACP
㊲	TROUT STREET 2+67.40	12.00		MATCH	COR, ACP
㊳	TROUT STREET 2+89.90	12.00		-	COR, ACP
㊴	TROUT STREET 1+25.70	15.90		-	TRANSITION CURB


NOTE:
1. WHERE ELEVATIONS ARE NOT PROVIDED, DETERMINE BY PROFILE AND TYPICAL SECTIONS.
2. SEE STRUCTURAL SHEETS FOR ALL STRUCTURAL DETAILS.

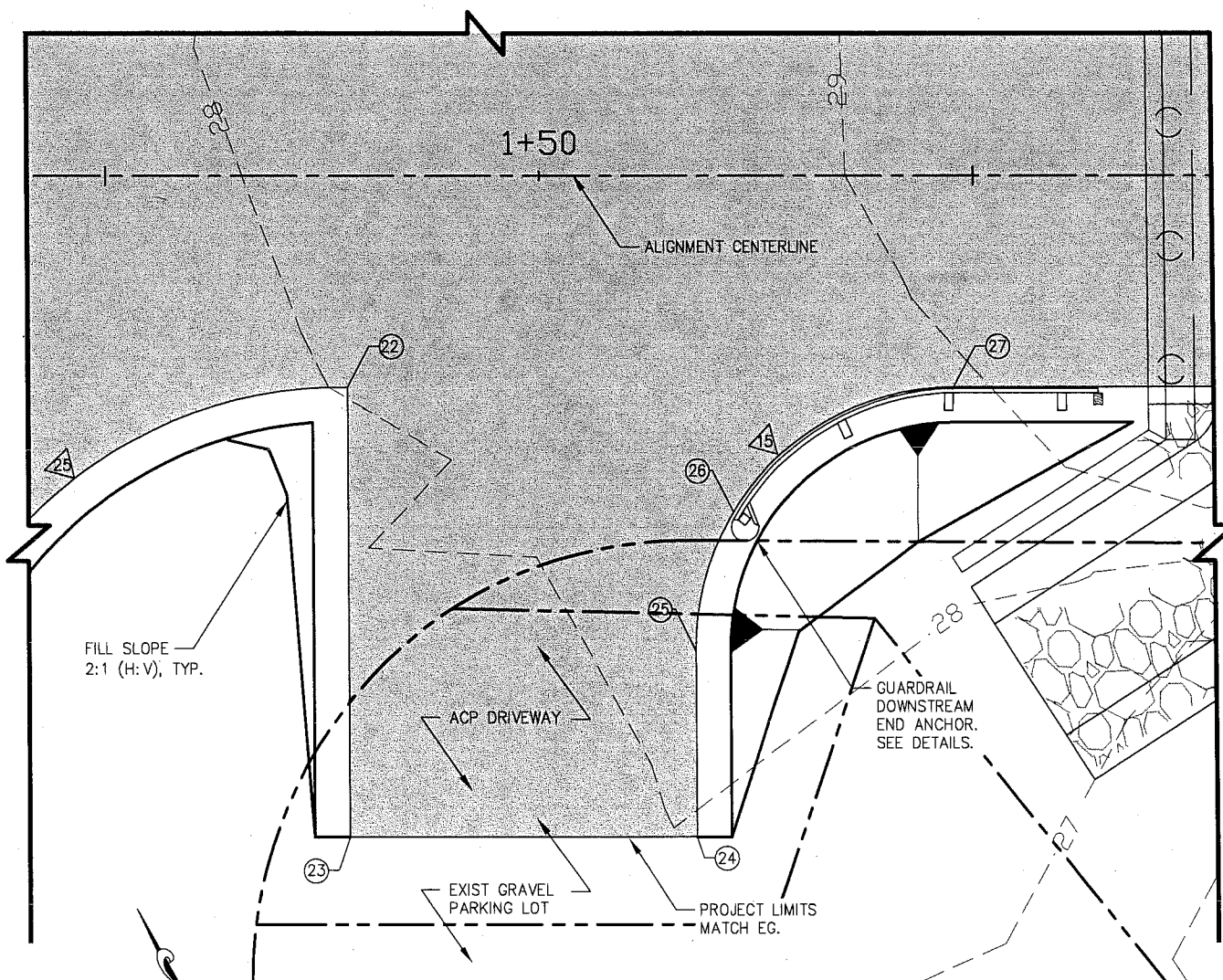
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KJD Date 9/10/13

PLANS PREPARED BY
PND ENGINEERS, INC.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: CMG		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION				
		JUNEAU BRIDGE REPAIR & UPGRADE TROUT STREET BRIDGE NO.1786				
DESIGNED BY: NAM		ROAD LAYOUT TABLE				
DRAWN BY: NAM						
PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN03 CIVIL\F2.DWG						
TAB: F2 Monday, April 02, 2012 4:31:42 PM LANCE GREER						
REVISIONS		PROJECT DESIGNATION		YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
				69561/AC-BR-0003(151)	2012	F2 29



1 NORTHWEST DRIVEWAY

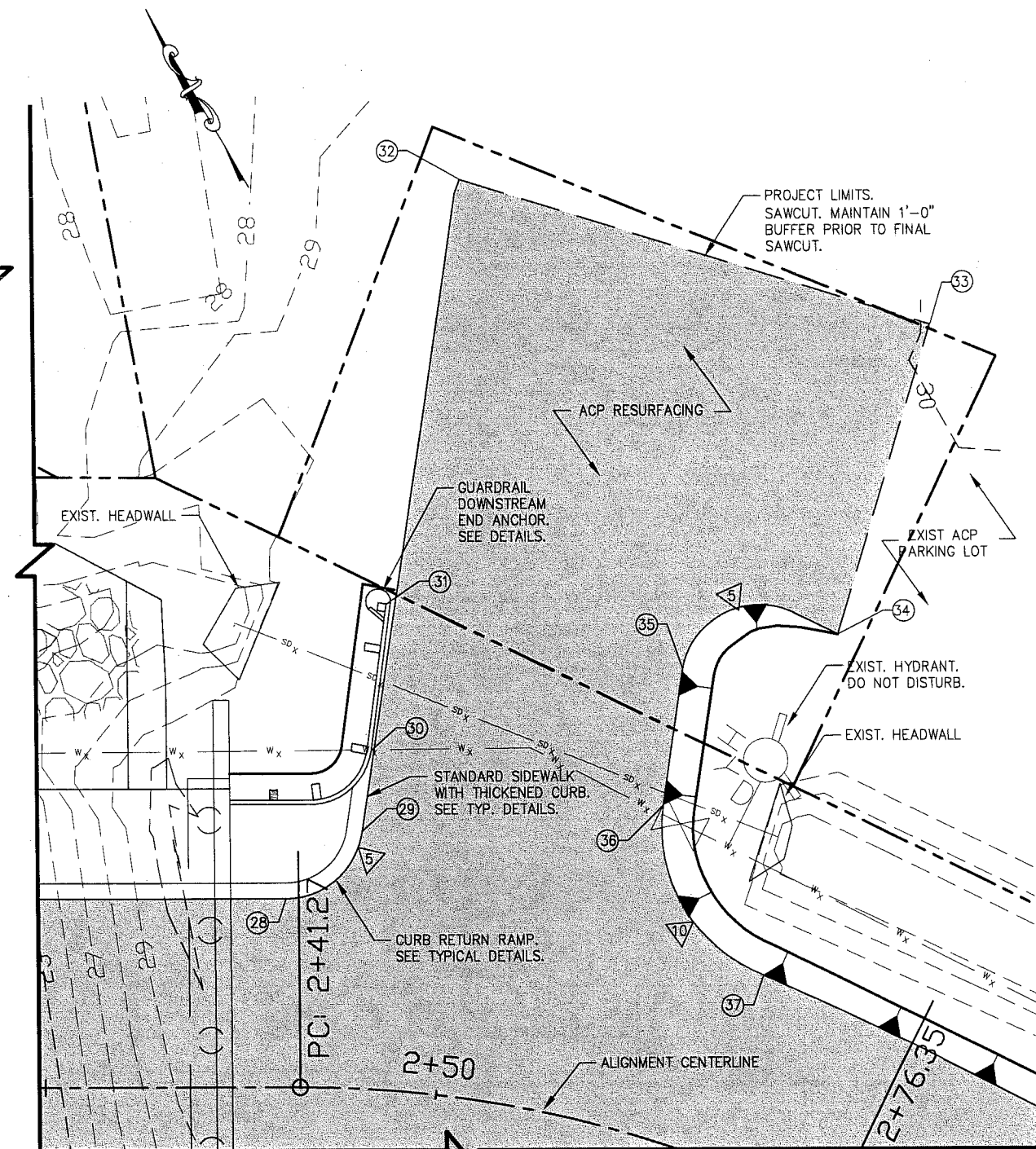
SCALE IN FEET
0 5 10 FT.

NOTE:
1. SEE STANDARD DRAWING G-04.07 FOR STEEL GUARDRAIL DETAILS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [Signature] Date 9/10/13

SURVEY NOTES:

1. SEE SITE PLAN AND LAYOUT TABLES FOR ALL LAYOUT INFORMATION.



2 SOUTHEAST DRIVEWAY

SCALE IN FEET
0 5 10 FT.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:N:\09XXX\092026 TROUT STREET
BRIDGE\DRAWINGS\IPND\3 CIVIL\G1.DWG

LANCE GREER
TAB: G1 Monday, April 02, 2012 4:31:37 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

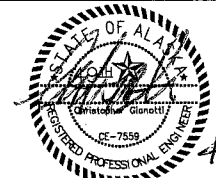
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PROPERTY LINES

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

DRIVEWAYS & INTERSECTIONS

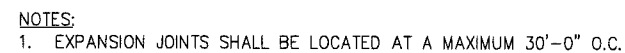
PROJECT DESIGNATION

69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012
SHEET NUMBER	TOTAL SHEETS
G1	29



- NOTES:
1. CONTROL JOINTS SHALL BE LOCATED AT 6'-0" O.C. TYP.



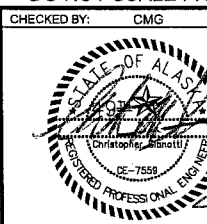
- NOTES:**
1. INSTALL DETECTABLE TILES THE FULL WIDTH OF RAMP AND DEPTH AS SHOWN. CURB RAMP SHALL CONFIRM TO STANDARD DRAWING I-21.01.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KTN Date 9/10/13



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



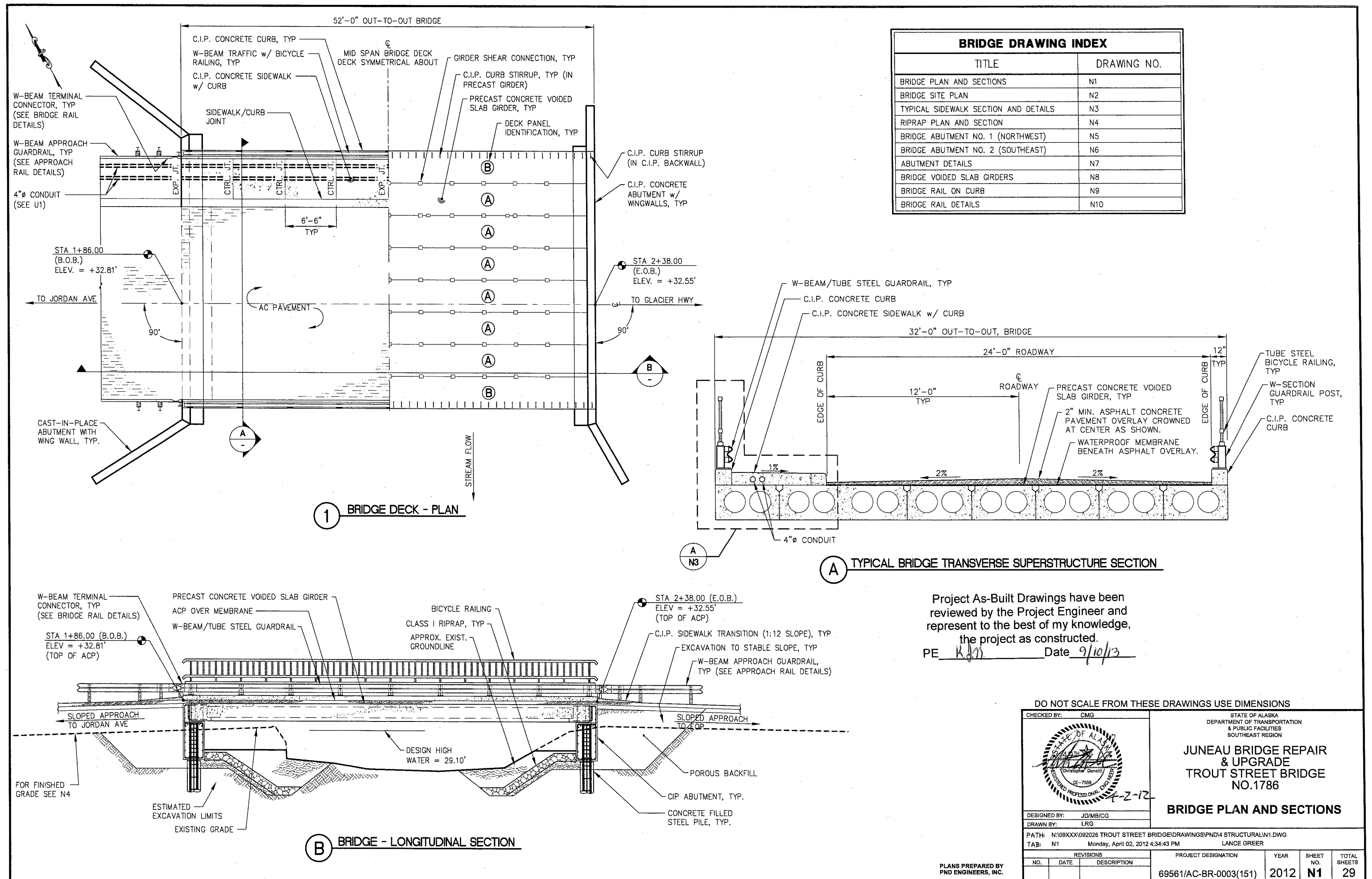
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

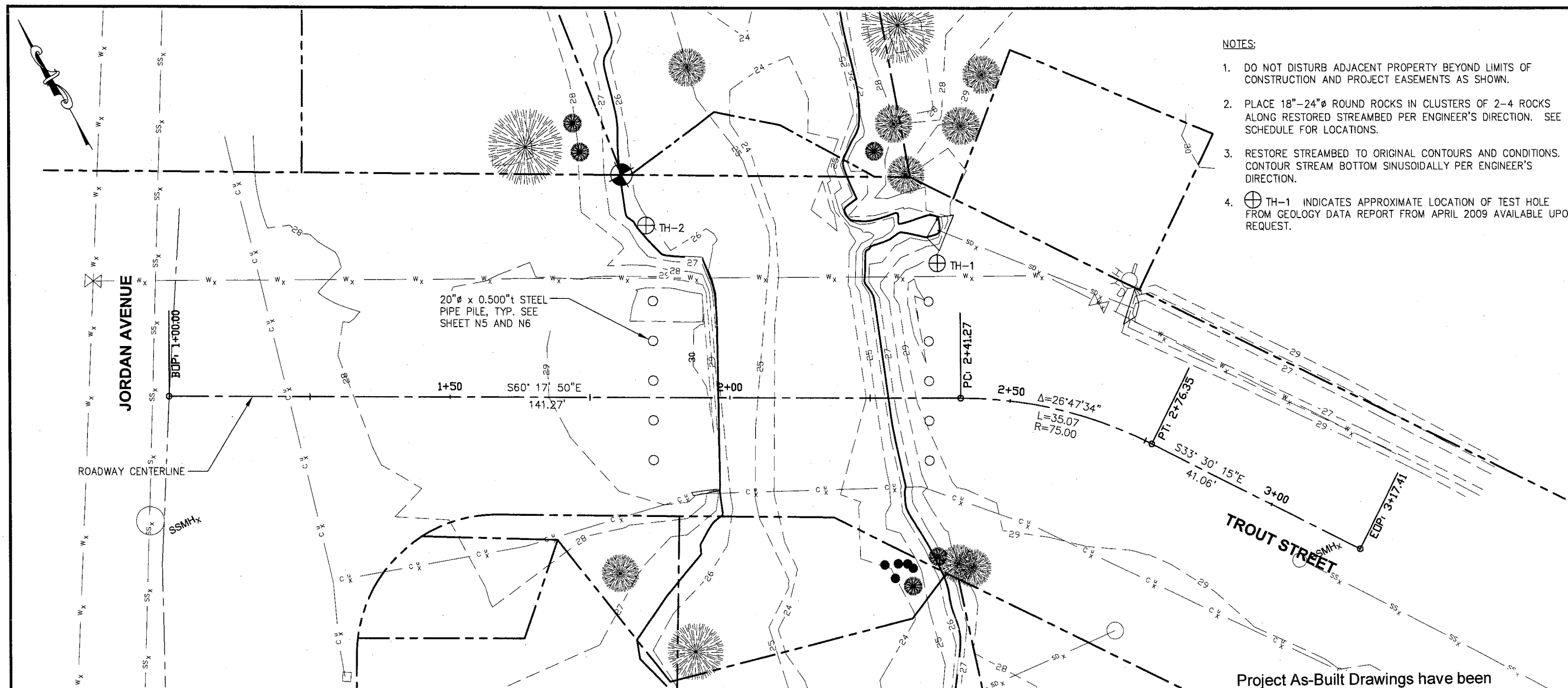
JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

TYPICAL DETAILS

DESIGNED BY: NAM			TYPICAL DETAILS				
DRAWN BY: NAM							
PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\IPND\3 CIVIL\1.DWG							
TAB: J1		Monday, April 02, 2012 4:31:32 PM			LANCE GREER		
REVISIONS			PROJECT DESIGNATION		YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	69561/AC-BR-0003(151)		2012	J1	29

**PLANS PREPARED BY
PND ENGINEERS, INC.**





- NOTES:**
- DO NOT DISTURB ADJACENT PROPERTY BEYOND LIMITS OF CONSTRUCTION AND PROJECT EASEMENTS AS SHOWN.
 - PLACE 18"-24" Ø ROUND ROCKS IN CLUSTERS OF 2-4 ROCKS ALONG RESTORED STREAMBED PER ENGINEER'S DIRECTION. SEE SCHEDULE FOR LOCATIONS.
 - RESTORE STREAMBED TO ORIGINAL CONTOURS AND CONDITIONS. CONTOUR STREAM BOTTOM SINUSOIDALLY PER ENGINEER'S DIRECTION.
 - ⊕ TH-1 INDICATES APPROXIMATE LOCATION OF TEST HOLE FROM GEOLOGY DATA REPORT FROM APRIL 2009 AVAILABLE UPON REQUEST.

HYDROLOGIC AND HYDRAULIC SUMMARY

RETURN PERIOD	2 yrs	50 yrs	100 yrs	500 yrs
EXCEEDANCE PROBABILTY	50%	2%	1%	0.2%
DESIGN DISCHARGE (cfs)	99 cfs	329 cfs	389 cfs	530 cfs
DESIGN HIGH WATER (ft MLLW)	26.3 ft	28.8 ft	29.1 ft	29.6 ft
DRAINAGE AREA	2.6 SQUARE MILES FOR THIS CROSSING			
ANTICIPATED ADDITIONAL BACKWATER (ft)	0.0	0.0	0.0	0.0
CONTRACTION SCOUR (ft)	0.0	0.0	0.0	0.0
ABUTMENT SCOUR (ft)	0.0	0.0	0.0	0.0
PIER SCOUR (ft)	NA	NA	NA	NA

PILE DATA TABLE

DRIVING CRITERIA				DESIGN DATA			
LOCATION	PILE TYPE	MINIMUM PENETRATION N (ft)	ESTIMATED TIP ELEVATION (ft)	DRIVING RESISTANCE (KIPS)	STRENGTH I FACTORED LOAD (KIPS)	NOMINAL RESISTANCE (KIPS)	RESISTANCE FACTOR, φ
ABUTMENT 1	20" x 0.500" t STEEL PIPE	90	-65	265	171	265	0.65
ABUTMENT 2	20" x 0.500" t STEEL PIPE	90	-65	265	171	265	0.65

BRIDGE SITE PLAN

SCALE IN FEET
0 10 20 FT.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KTD Date 9/10/13

STRUCTURAL GENERAL NOTES

1.0 DESIGN CRITERIA

1.1 CODE

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, FIFTH EDITION, 2010 WITH LATEST INTERIM SPECIFICATIONS

1.2 LOADS

- 1.1 LIVE LOADS: HL 93
 1.2 DEAD LOADS: INCLUDES 60 PSF FOR ACP WEARING SURFACE
 1.3 SEISMIC PARAMETERS:
 PGA = 0.169g
 S_s = 0.393g
 S₁ = 0.213g
 SITE CLASS E
 LIQUEFACTION POTENTIAL HIGH
 AASHTO 7% PROBABILITY OF EXCEEDENCE IN 75 YEARS
 1.4 HYDRAULIC CRITERIA: SEE SUMMARY TABLE THIS SHEET.

2.0 MATERIALS

- 2.1 STEEL PILING
 USE STEEL PIPE PILING CONFORMING TO API 5L x 46 (F_y = 46 KSI) HOT-DIP GALVANIZE PILES IN ACCORDANCE WITH ASTM A123. USE CONICAL TIPS. WELD SPLICE PILES IN ACCORDANCE WITH AWS D1.1 AND UT ALL WELDED SPLICES.
 2.2 CONCRETE REINFORCING
 USE CONCRETE REINFORCING CONFORMING WITH ASTM A615, GRADE 60 EXCEPT WHERE REINFORCING IS DESIGNATED TO BE WELDED. WHERE WELDED USE REINFORCING CONFORMING TO ASTM A706 GRADE 60. WELD IN ACCORDANCE WITH AWS D1.4.
 2.3 CAST IN PLACE CONCRETE
 USE CLASS A CONCRETE WITH A 28 DAY STRENGTH OF f_c' = 4,000 PSI.
 2.4 PRE-CAST, PRE-STRESSED CONCRETE VOIDED SLAB GIRDERS
 USE CLASS AA CONCRETE WITH A 28 DAY STRENGTH OF f_c' = 6,000 PSI
 2.5 STRUCTURAL STEEL
 USE THE FOLLOWING GRADES OF STEEL:
 PLATE ASTM A36
 W SECTIONS ASTM A992
 PIPE ASTM A53, GRADE B
 HSS ASTM A500 GRADE B, F_y = 46 KSI

PATH:N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\IND4 STRUCTURAL\IND2.DWG

LANCE GREER
 TAB: N2 Monday, April 02, 2012 4:34:37 PM

ADDENDUM NUMBER

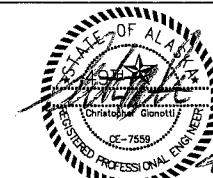
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR
 & UPGRADE
 TROUT STREET BRIDGE
 NO.1786**

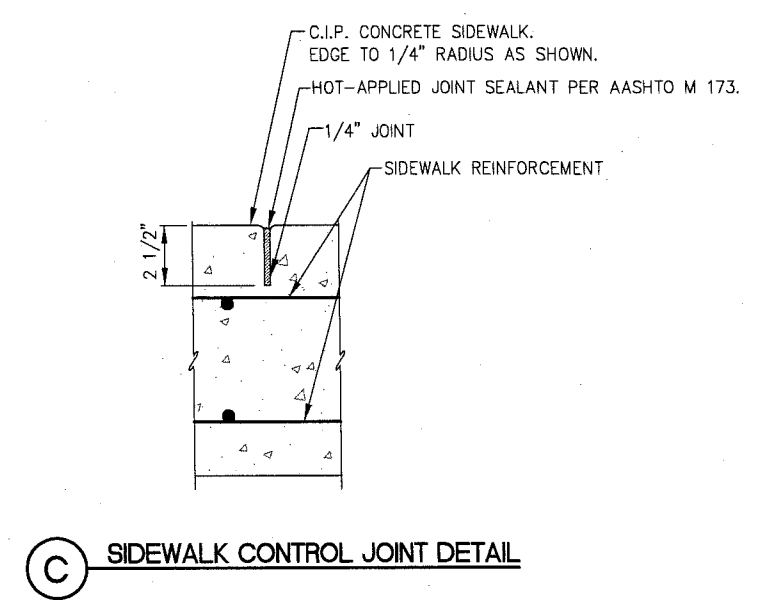
BRIDGE SITE PLAN

PROJECT DESIGNATION

69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012
SHEET NUMBER	TOTAL SHEETS
N2	29

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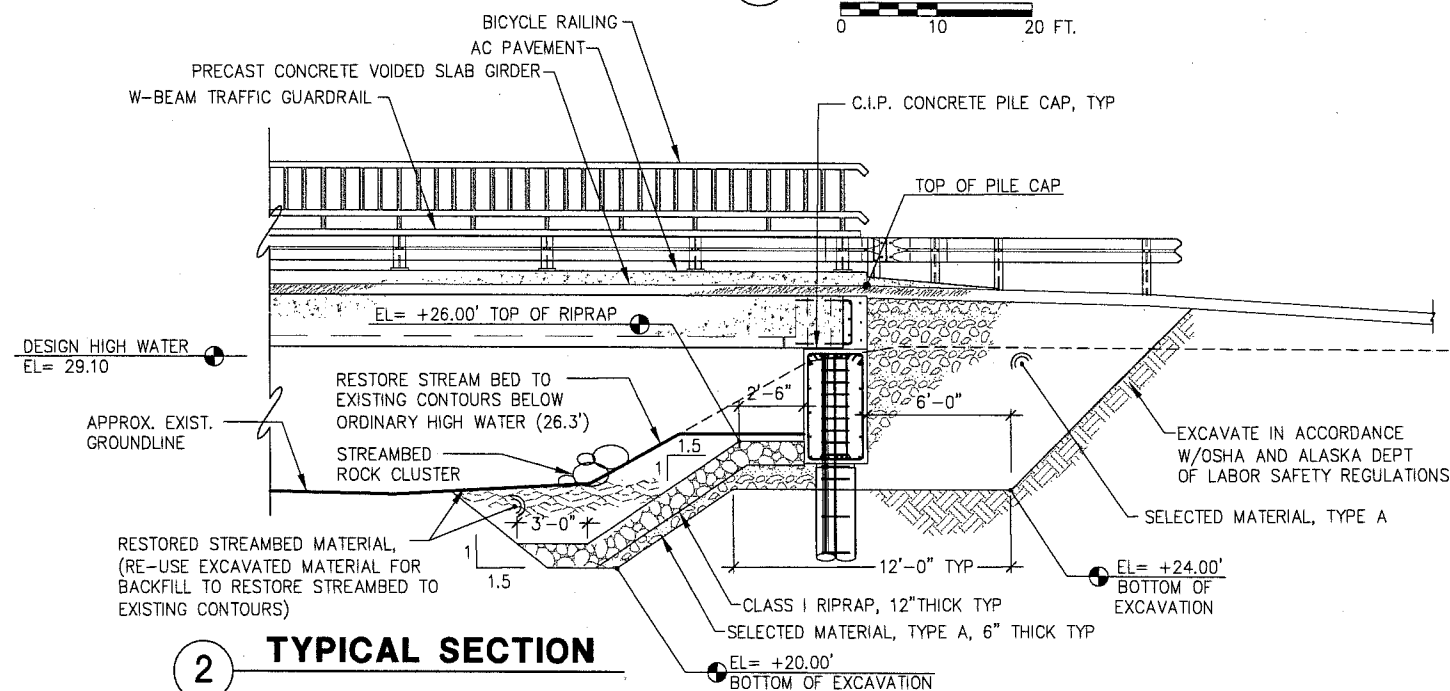
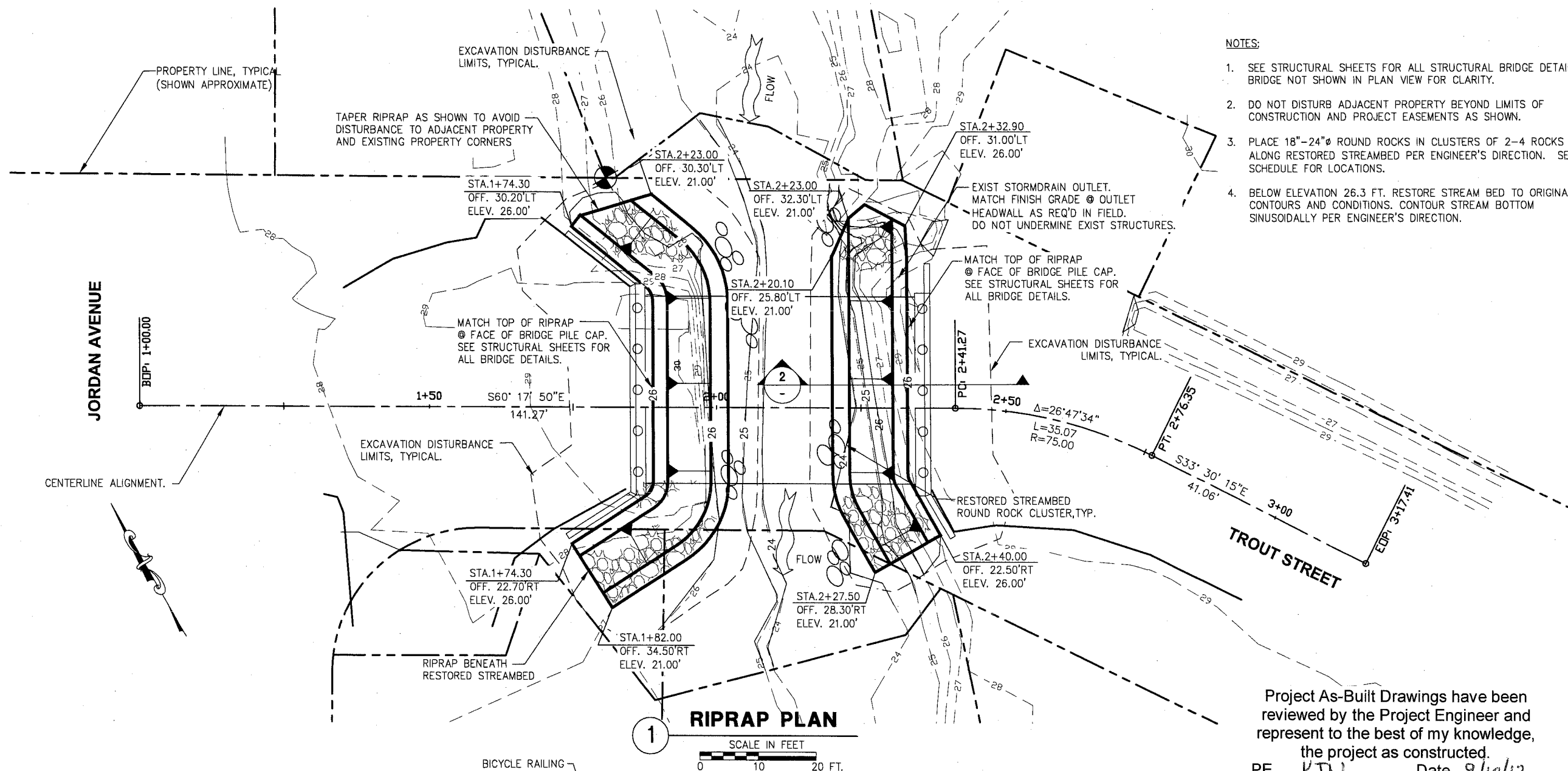
1. ALL REINFORCING STEEL SHALL HAVE MINIMUM OF 2" CONCRETE COVER EXCEPT AS NEEDED.
2. ALL JOINTS SHALL BE EDGED.
3. EXPANSION JOINTS AND CONTROL JOINTS SHALL BE MAX. $\frac{1}{2}$ ", MIN. $\frac{1}{4}$ ", WITH NO GAPS FOR WATER INTRUSION. JOINTS SHALL BE LOCATED AS SHOWN ON BRIDGE PLAN.
4. STEEL TROWELING FINISH REQUIRED PRIOR TO BROOM FINISH ON ALL SIDEWALK SURFACES.
5. ENGINEER APPROVED CONCRETE CURING COMPOUND SHALL BE APPLIED, PER MANUFACTURER'S RECOMMENDATIONS, TO ALL EXPOSED SIDEWALK SURFACES.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KTN Date 9/10/13

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			69561/AC-BR-0003(151)	2012	N3	29

**PLANS PREPARED BY
PND ENGINEERS, INC.**



ROUND ROCK CLUSTER SCHEDULE			
STATION	OFFSET (FT)		DESCRIPTION
	LEFT	RIGHT	
TROUT STREET 2+03		11.5	3 ROCKS
TROUT STREET 2+06	14		4 ROCKS
TROUT STREET 2+01	27		3 ROCKS
TROUT STREET 2+20	32		5 ROCKS
TROUT STREET 2+22		6.5	4 ROCKS
TROUT STREET 2+21		28	3 ROCKS
TROUT STREET 1+94	30.5		4 ROCKS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\IND3 CIVIL\N4.DWG

LANCE GREER
TAB: N4 Monday, April 02, 2012 4:31:27 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: CMG

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION
4-2-12

PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

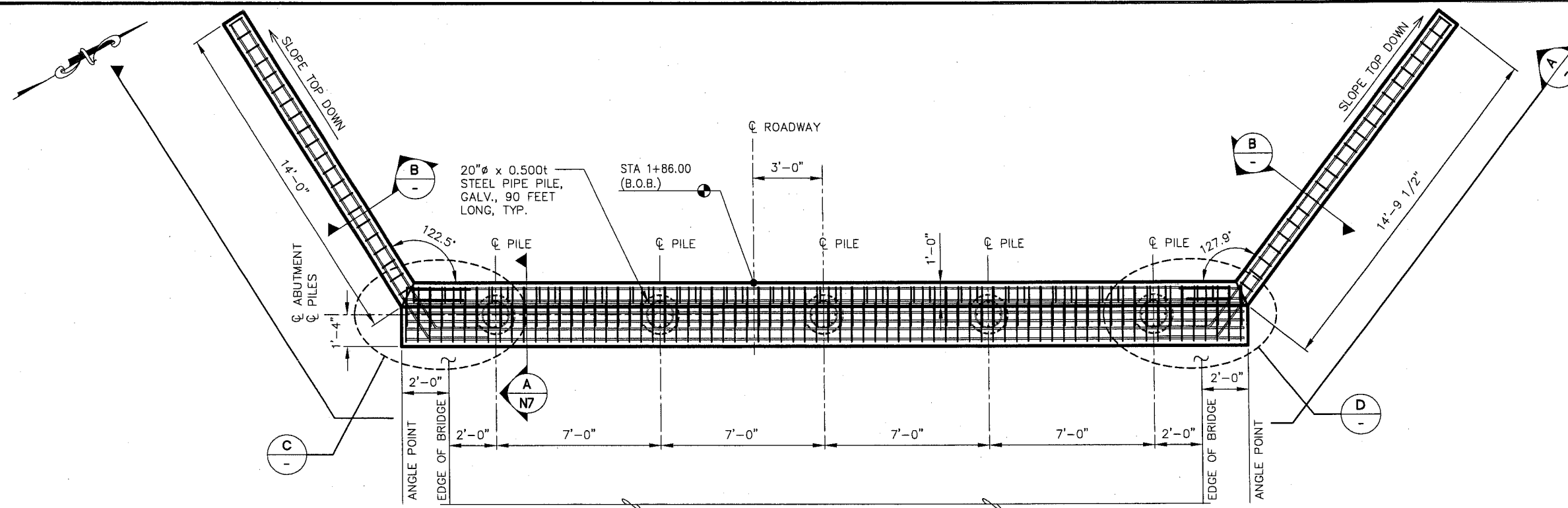
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR & UPGRADE
TROUT STREET BRIDGE
NO. 1786**

RIPRAP PLAN AND SECTION

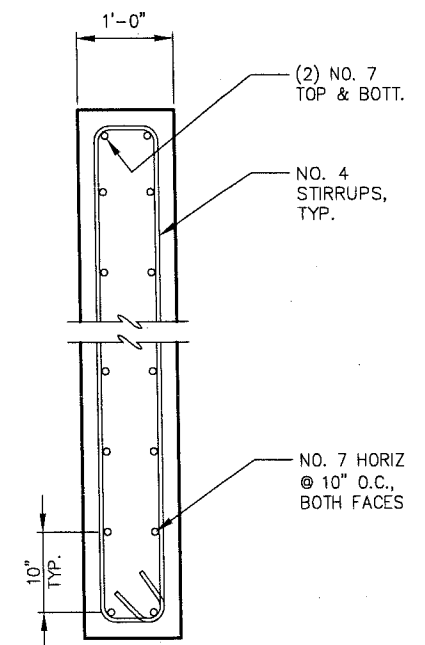
PROJECT DESIGNATION
69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012
SHEET NUMBER	TOTAL SHEETS
N4	29

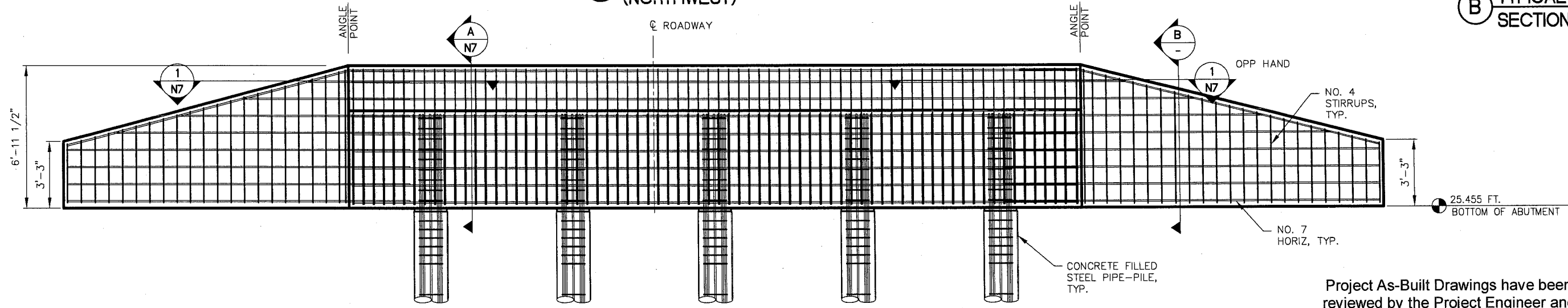


1 BRIDGE ABUTMENT NO. 1 - PLAN (NORTHWEST)

SCALE IN FEET
0 2 4ft.



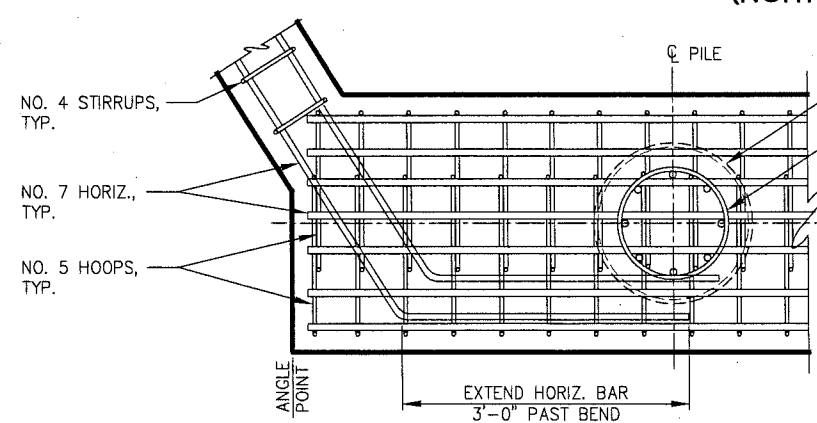
B TYPICAL WING WALL SECTION



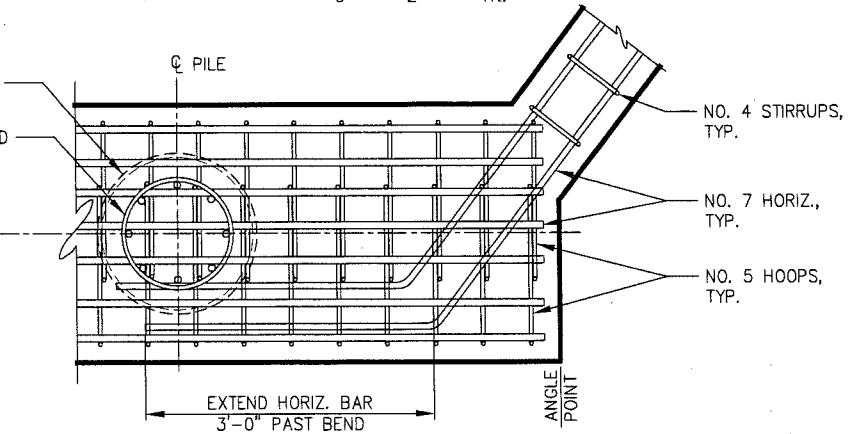
A BRIDGE ABUTMENT NO. 1 - ELEVATION (NORTHWEST)

SCALE IN FEET
0 2 4ft.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE KTN Date 9/10/13

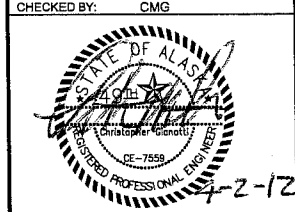


C BRIDGE ABUTMENT AT ANGLE POINT



D BRIDGE ABUTMENT AT ANGLE POINT

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



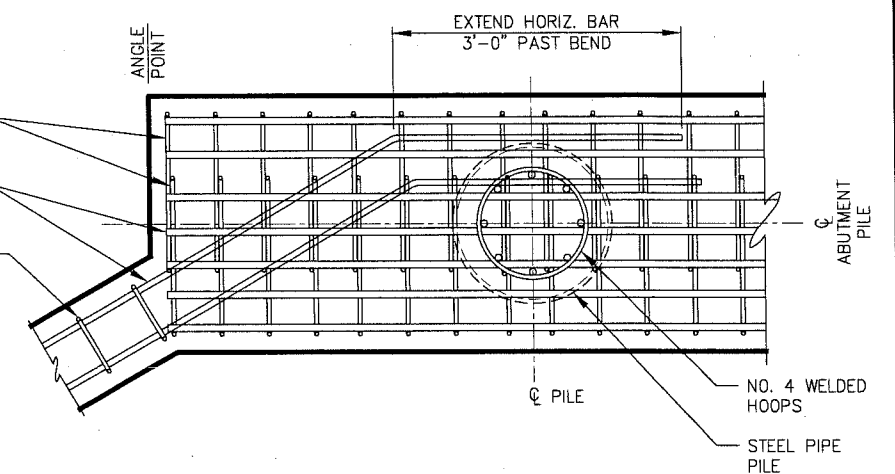
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

BRIDGE ABUTMENT NO. 1
(NORTHWEST)

DESIGNED BY: MB/CG	PROJECT DESIGNATION: 69561/AC-BR-0003(151)	YEAR: 2012	SHEET NO. N5	TOTAL SHEETS 29
DRAWN BY: LRG				
PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PND\4 STRUCTURAL\N5.DWG				
TAB: N5				
Monday, April 02, 2012 4:34:29 PM				
LANCE GREER				
REVISIONS				
NO. DATE DESCRIPTION				

PLANS PREPARED BY
PND ENGINEERS, INC.



(B) BRIDGE ABUTMENT AT ANGLE POINT

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KJN Date 7/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: CMG

STATE OF ALASKA
REGISTERED PROFESSIONAL ENGINEER
Christopher Gianotti
CE-7559

fz-

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

**BRIDGE ABUTMENT NO. 2
(SOUTHEAST)**

DESIGNED BY:	BN/ME
DRAWN BY:	LRG

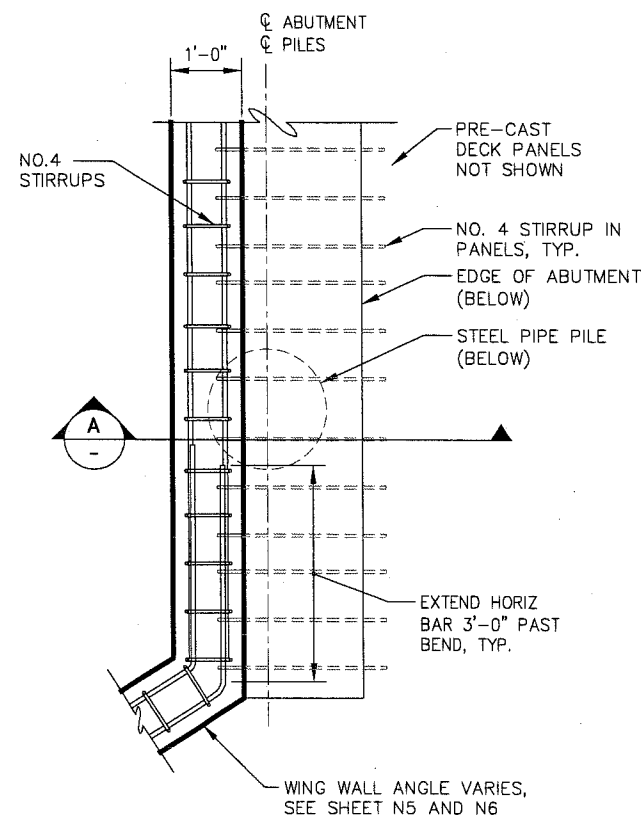
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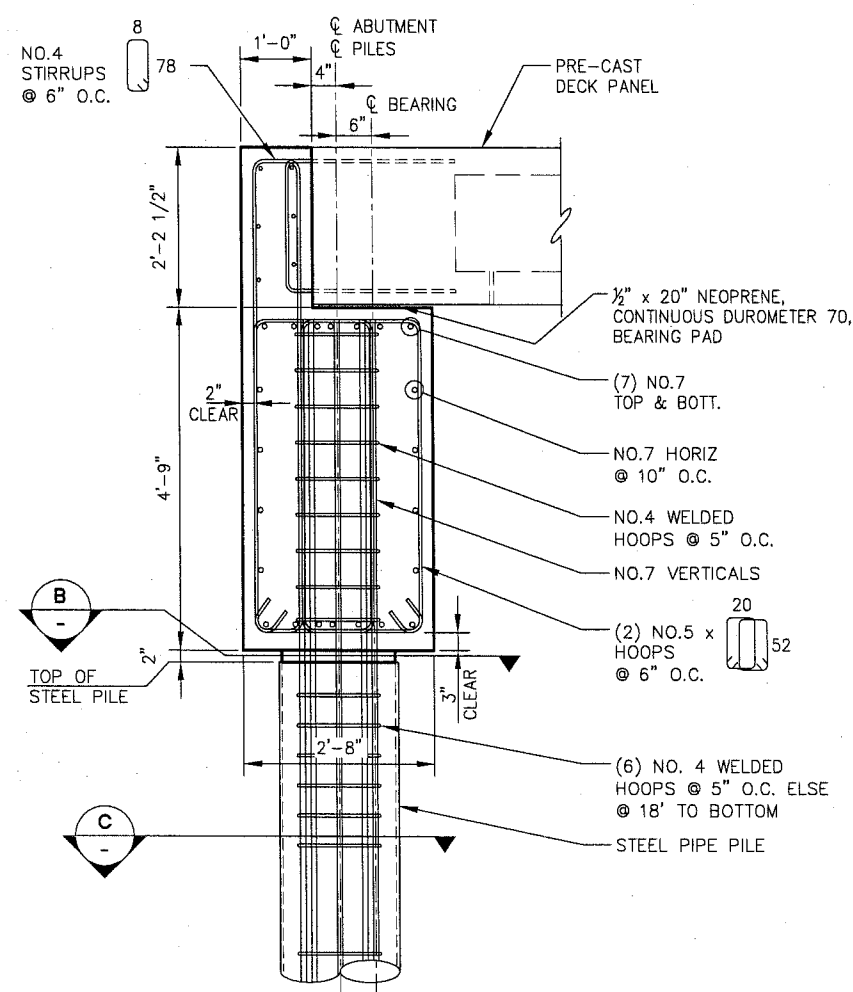
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REVISIONS			PROJECT DESIGNATION 69561/AC-BR-0003(151)	YEAR 2012	SHEET NO. N6	TOTAL SHEETS 29
NO.	DATE	DESCRIPTION				

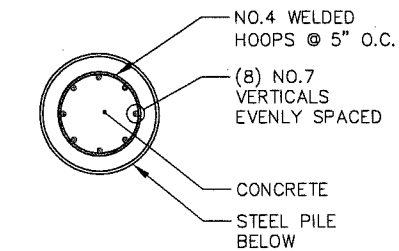
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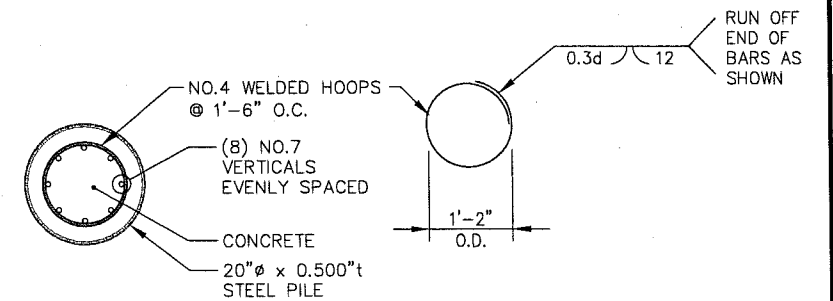
1 TYPICAL BRIDGE ABUTMENT WING WALL DETAIL



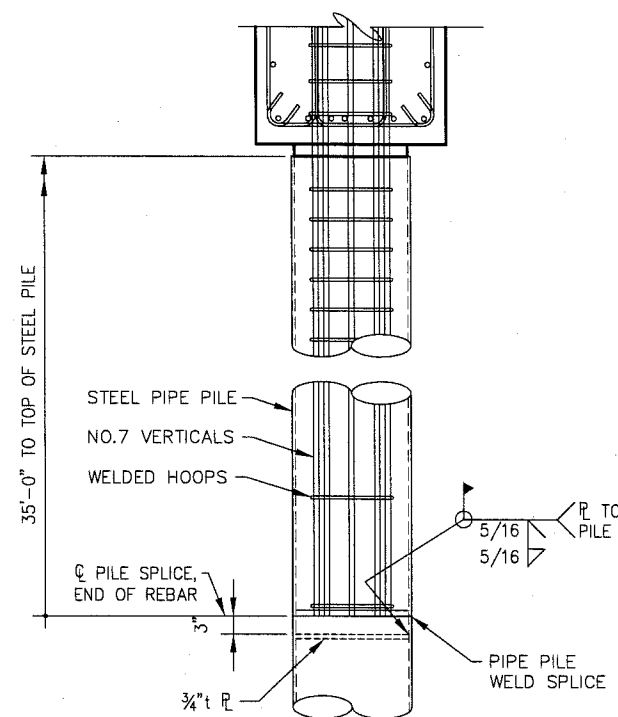
A PILE TO ABUTMENT CONNECTION SECTION



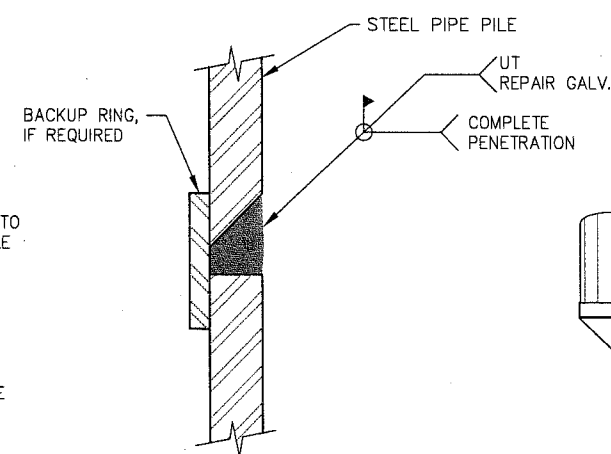
B TYPICAL PILE DETAILS



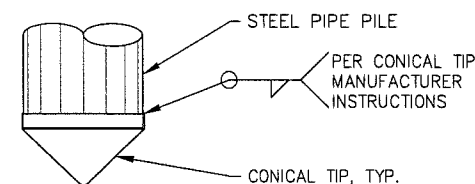
C WELDED HOOP DETAIL



D END OF CONCRETE IN PILE



E TYPICAL PIPE PILE WELD SPLICE



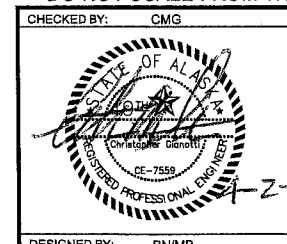
F PILE TIP DETAIL
TYPICAL ALL STEEL PILES

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KIN Date 9/10/13

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

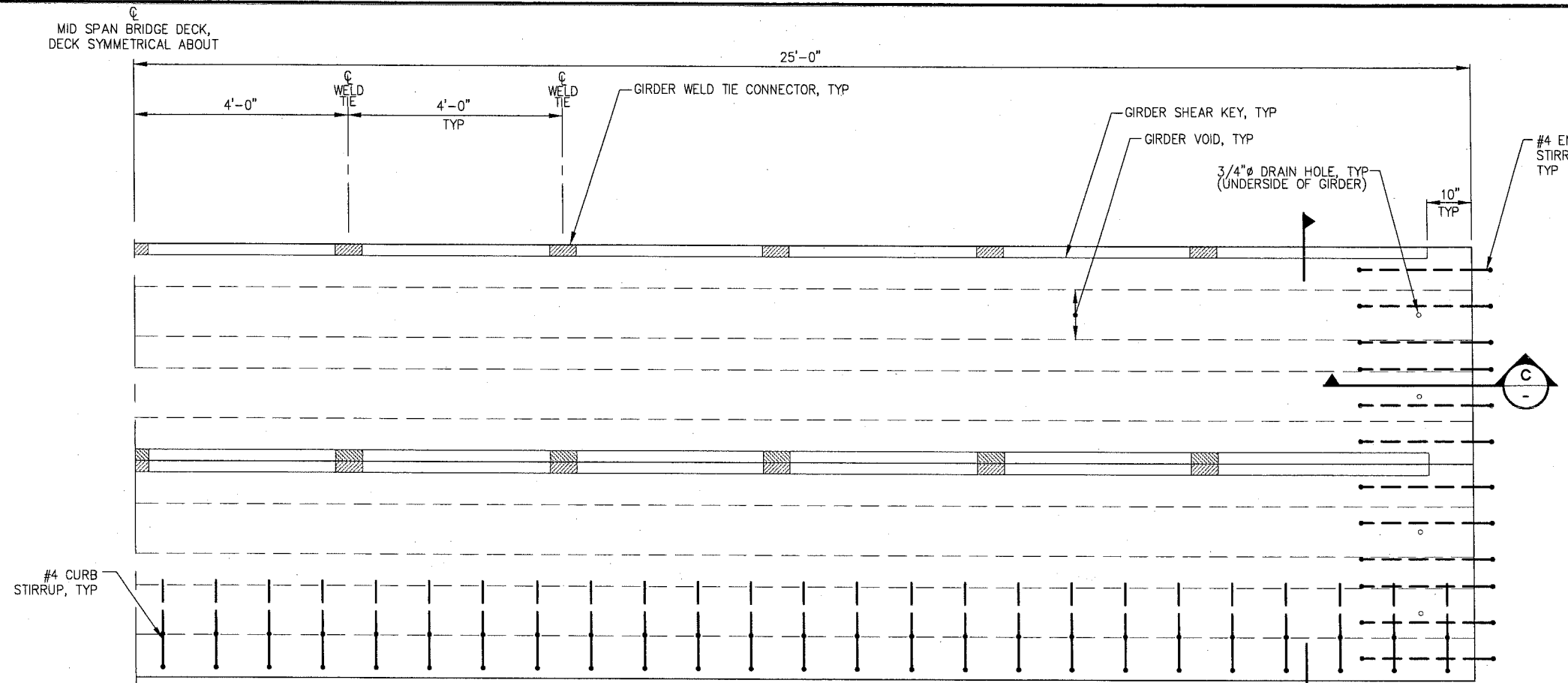
**JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO. 1786**

ABUTMENT DETAILS

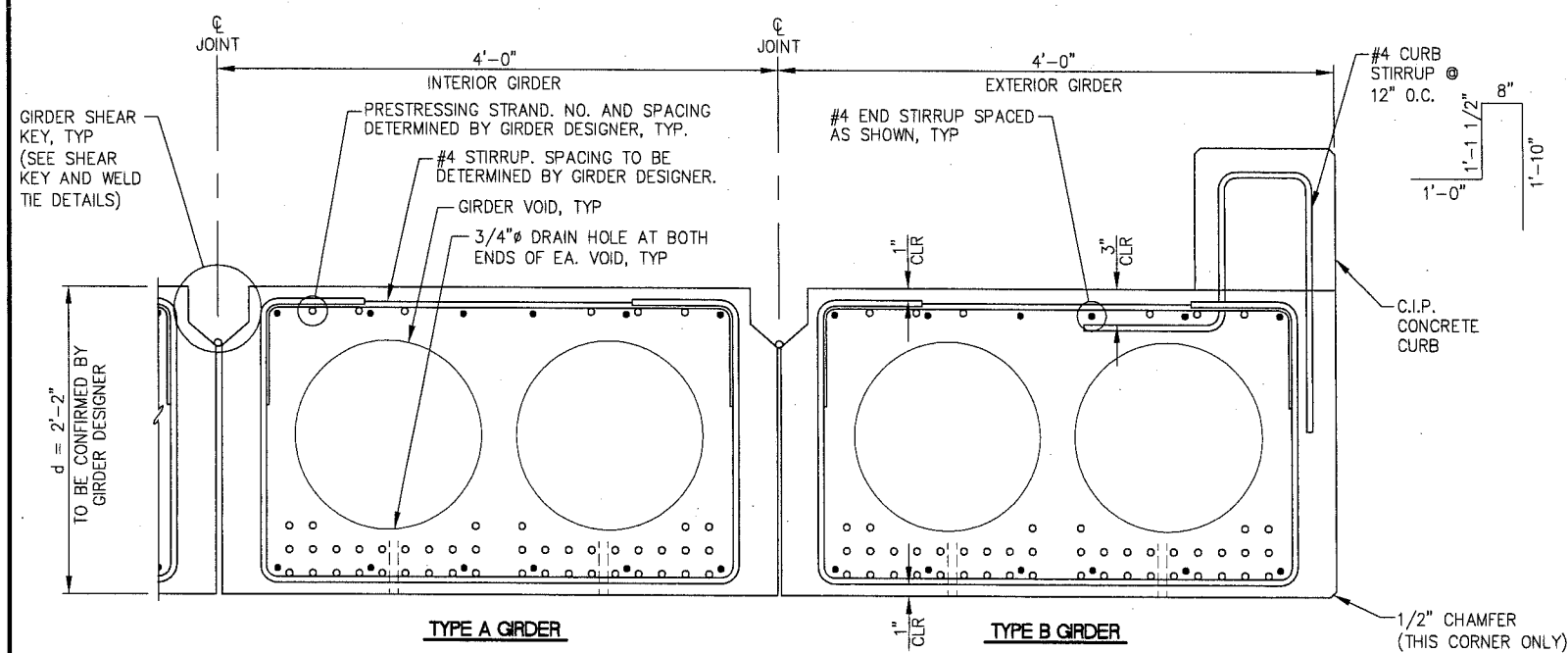
DESIGNED BY: BN/MB
DRAWN BY: LRG

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TAB: N7 Monday, April 02, 2012 4:34:20 PM LANCE GREER

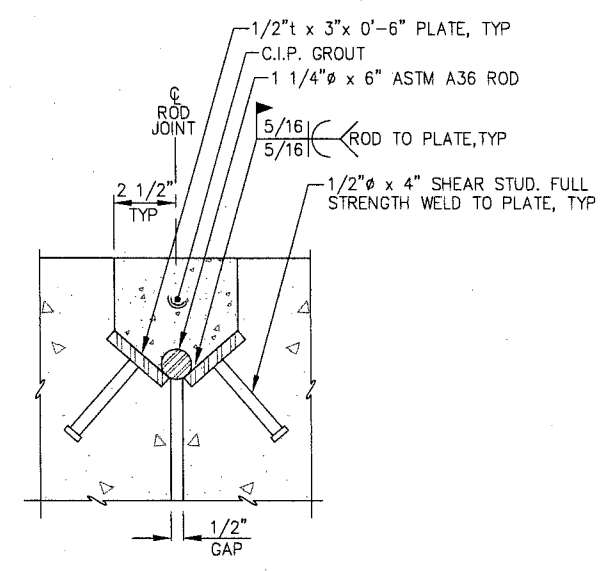
REVISIONS			PROJECT DESIGNATION		YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	69561/AC-BR-0003(151)		2012	N7	29



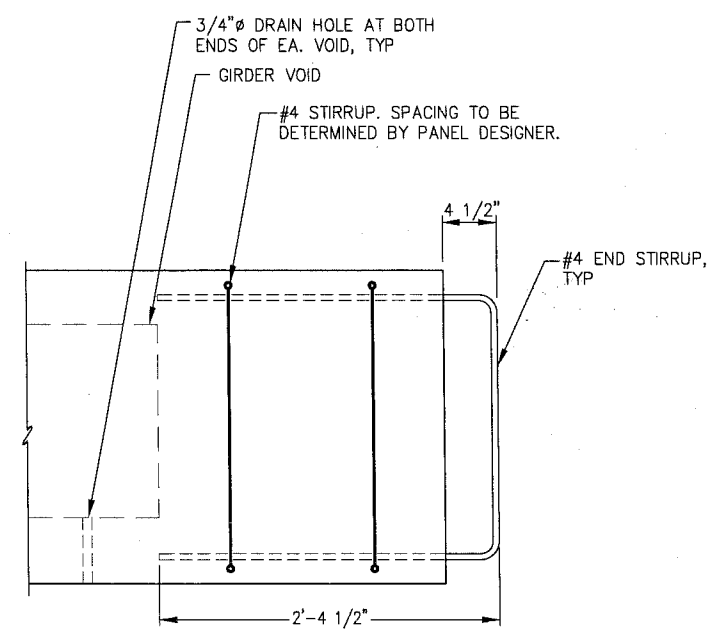
1 VOIDED SLAB GIRDERS - PARTIAL PLAN



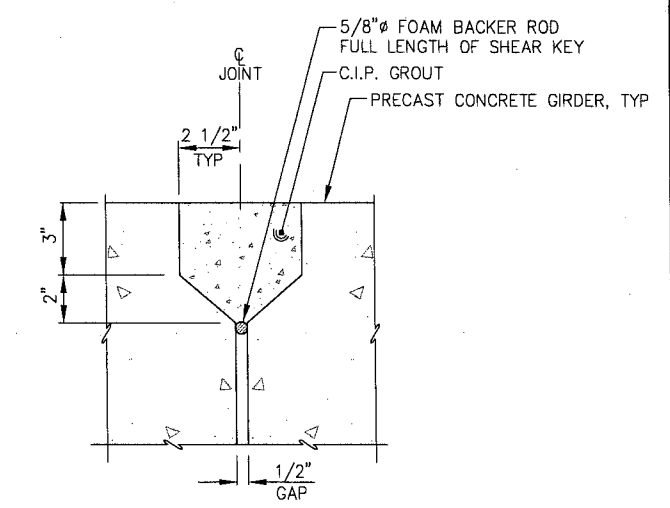
A VOIDED SLAB GIRDER SECTION



B TYPICAL WELDED TIE DETAIL



C VOIDED SLAB GIRDER END DETAIL



D TYPICAL GROUT JOINT DETAIL
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE KJU Date 9/10/13

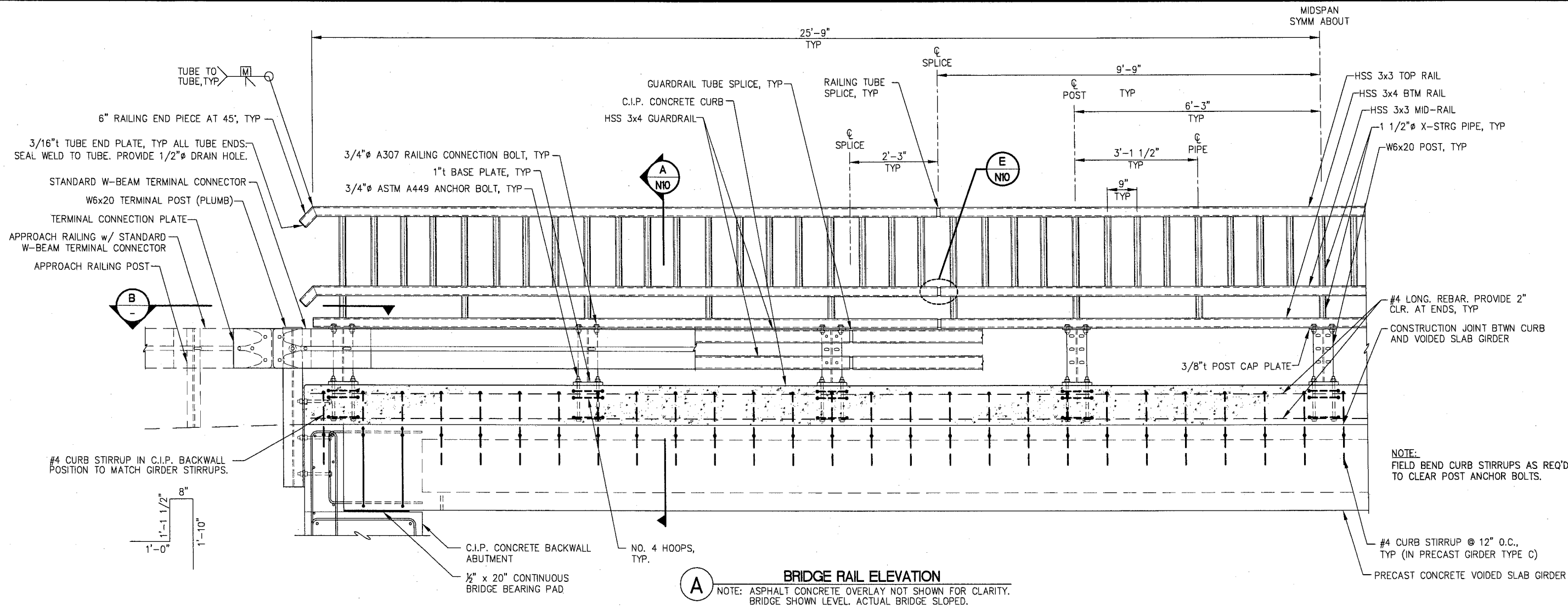
VOIDED SLAB GIRDER GENERAL NOTES

- GENERAL: THE FOLLOWING ARE GENERAL NOTES THAT APPLY TO FABRICATION OF PRESTRESS CONCRETE GIRDERS:
- PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
 - PROVIDE A MAGNESIUM FLOAT FINISH ON ROADWAY SURFACE OF THE PRECAST MEMBER. ROUGHEN SURFACE UNDER C.I.P. CURB.
 - PROVIDE LIFTING EMBEDMENTS AS REQUIRED.

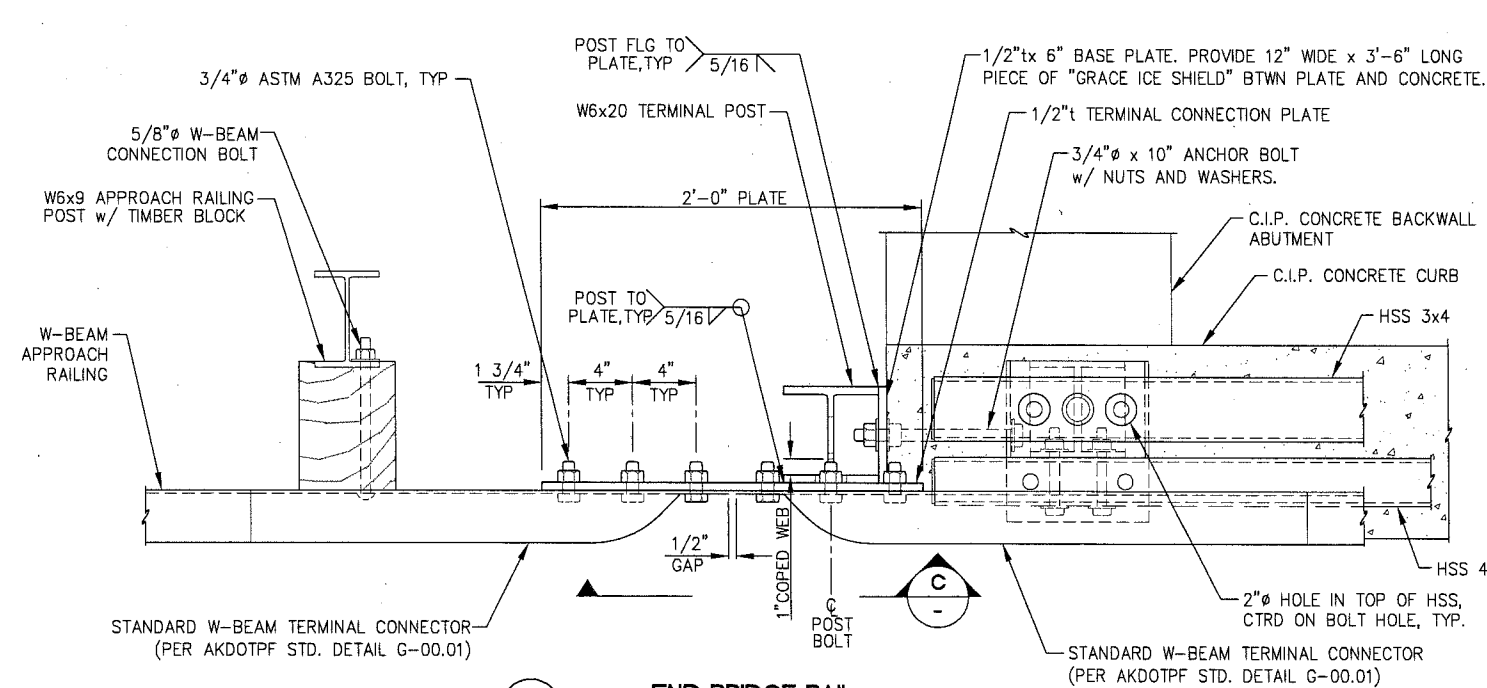
PLANS PREPARED BY
PND ENGINEERS, INC.

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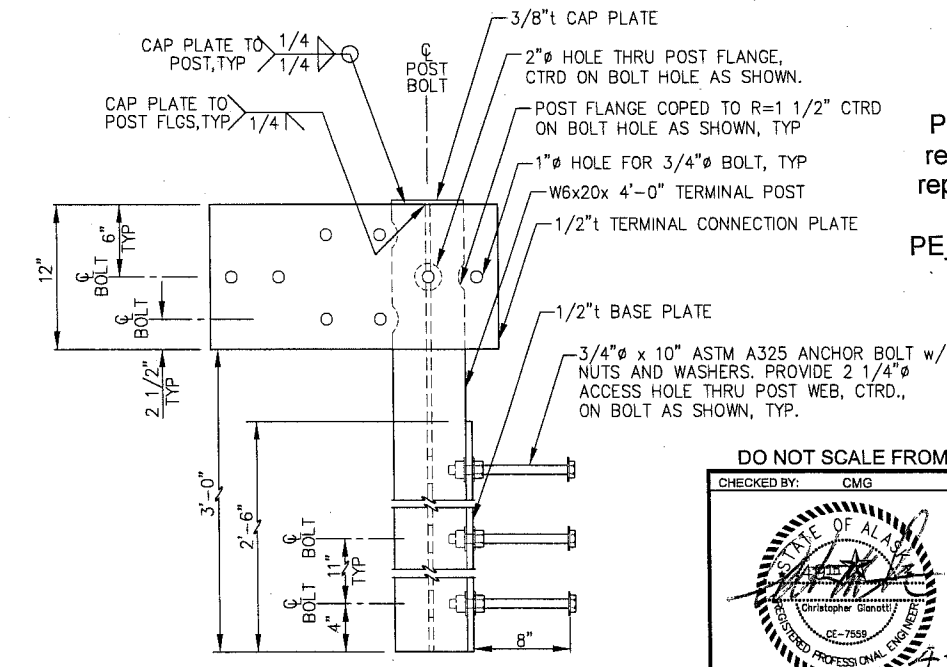
CHECKED BY: CMG		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
DESIGNED BY: JLD		JUNEAU BRIDGE REPAIR & UPGRADE TROUT STREET BRIDGE NO.1786	
DRAWN BY: JLD / LRG		BRIDGE VOIDED SLAB GIRDERS	
PATH: N:\09XXX\1092026 TROUT STREET BRIDGE\DRAWINGS\PN04 STRUCTURAL\N8.DWG			
TAB: N8 Monday, April 02, 2012 4:34:14 PM LANCE GREER			
REVISIONS		PROJECT DESIGNATION	YEAR
NO.	DATE	DESCRIPTION	SHEET NO.
			29
		69561/AC-BR-0003(151)	2012



A BRIDGE RAIL ELEVATION
 NOTE: ASPHALT CONCRETE OVERLAY NOT SHOWN FOR CLARITY. BRIDGE SHOWN LEVEL. ACTUAL BRIDGE SLOPED.



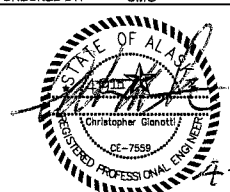
B END BRIDGE RAIL
 NOTE: POST CAP PLATE NOT SHOWN FOR CLARITY.

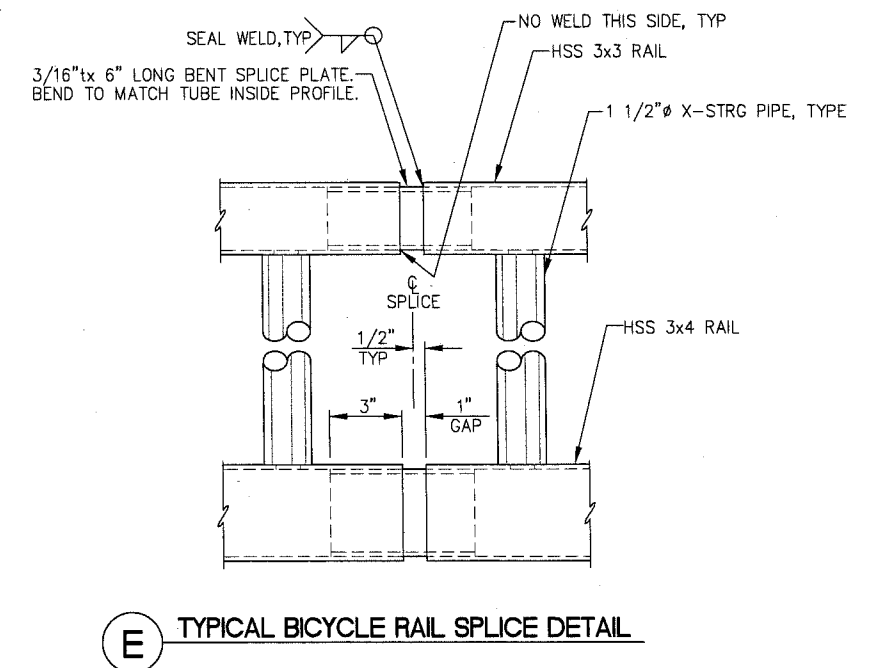
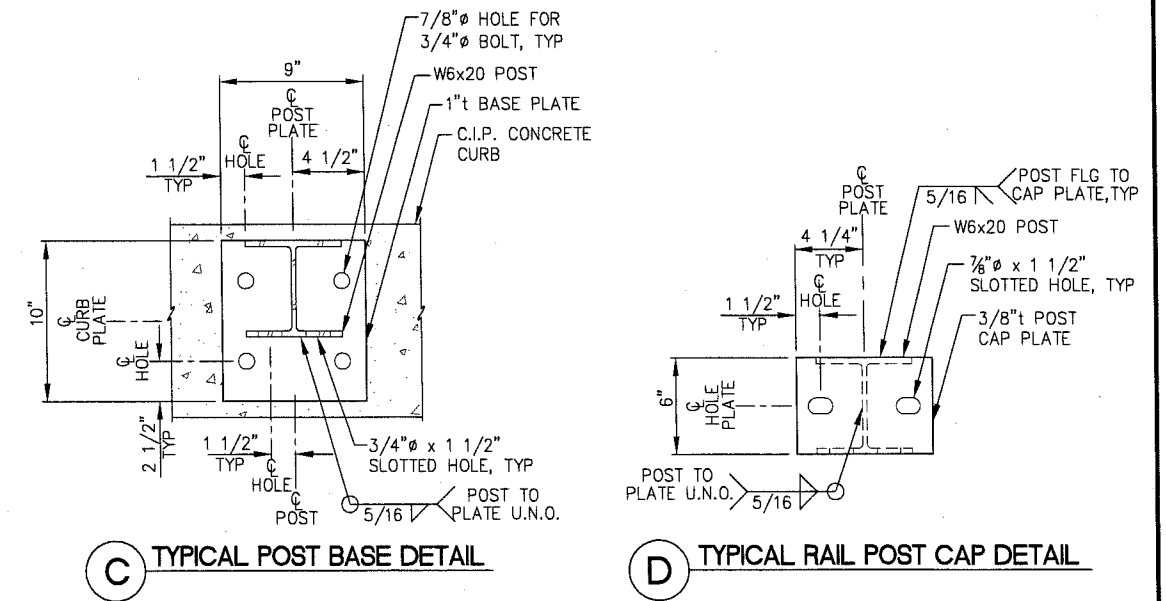
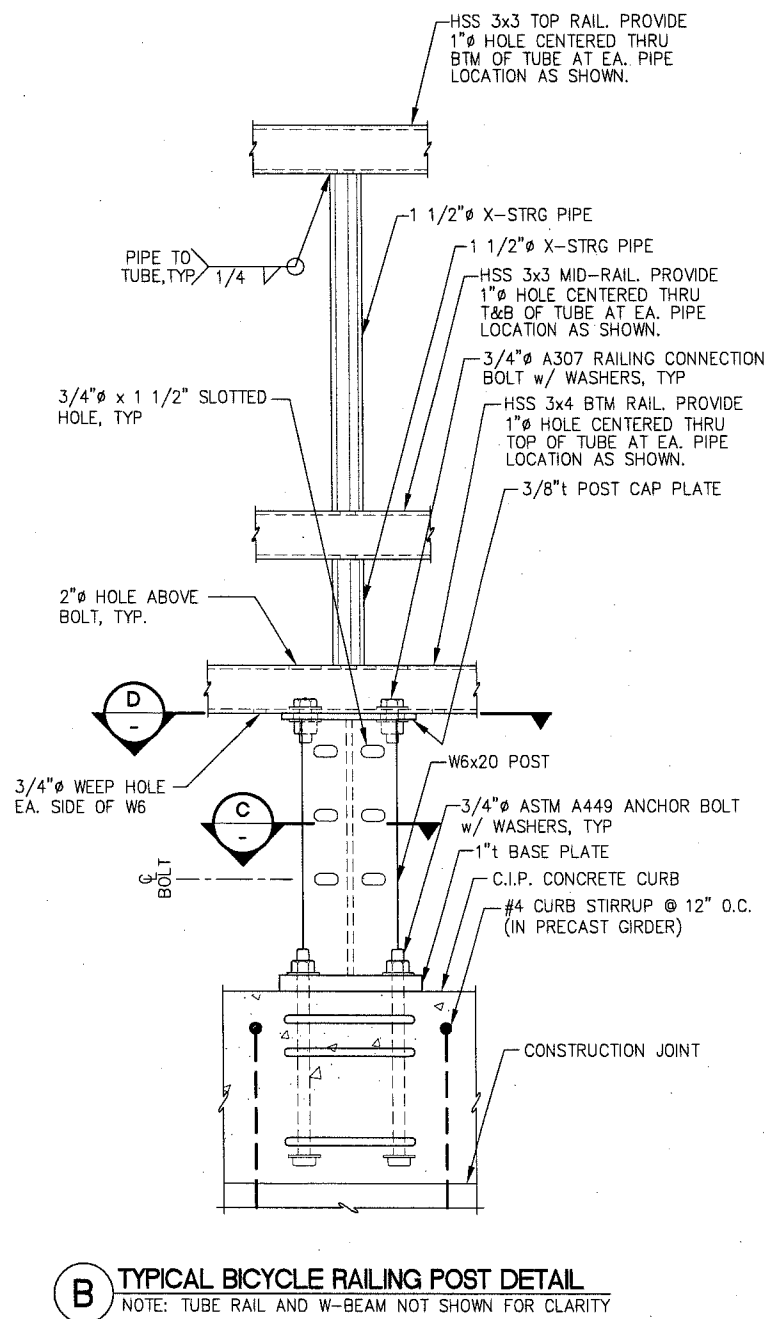
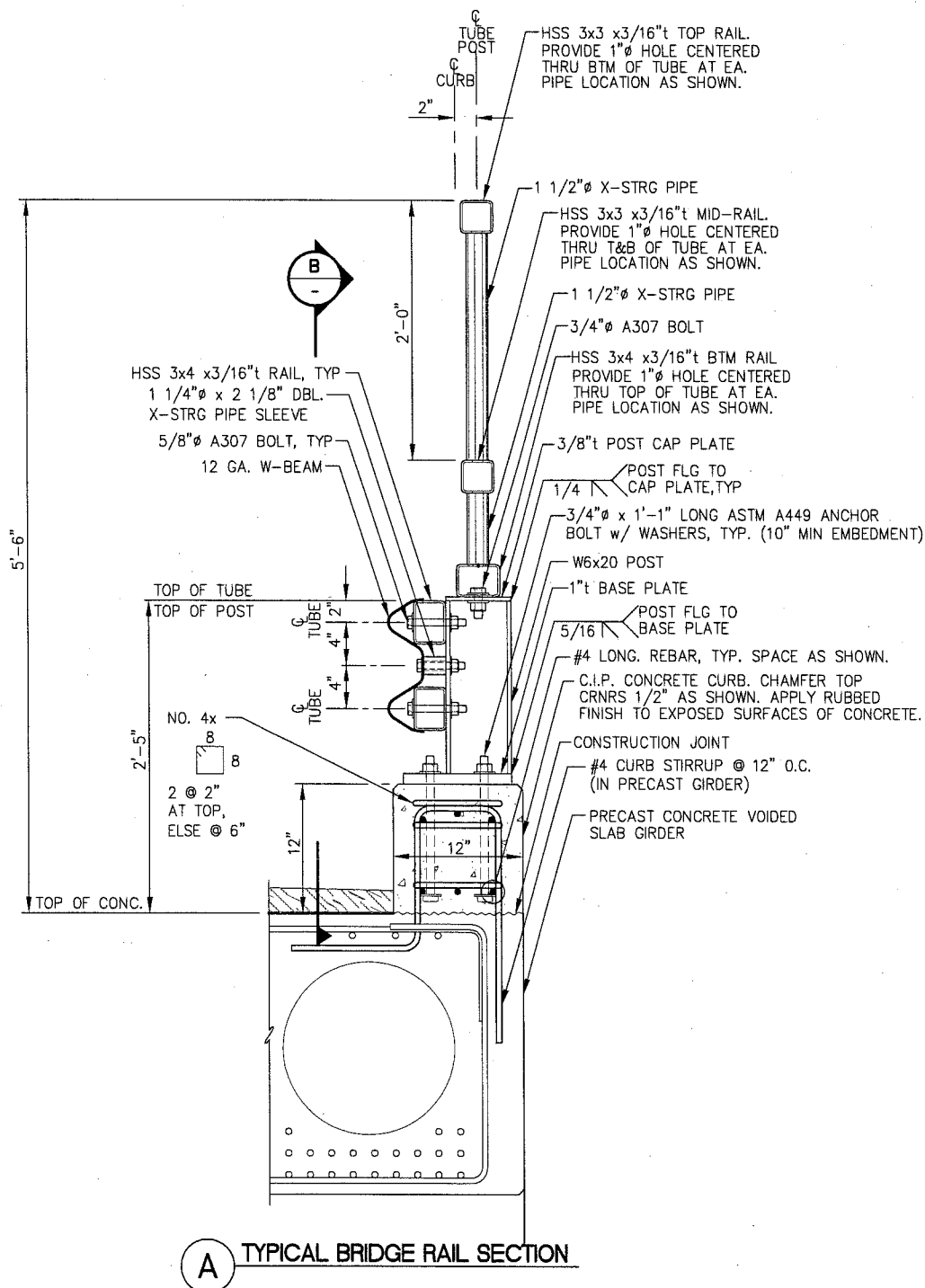


C END POST DETAIL

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE K.T.U. Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: CMG 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION	
DESIGNED BY: JLD DRAWN BY: JLD / LRG		JUNEAU BRIDGE REPAIR & UPGRADE TROUT STREET BRIDGE NO.1786	
PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\PN\4 STRUCTURAL\N9.DWG TAB: N9 Monday, April 02, 2012 4:34:10 PM LANCE GREER		BRIDGE RAIL ON CURB	
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 69561/AC-BR-0003(151)	YEAR 2012
		SHEET NO. N9	TOTAL SHEETS 29

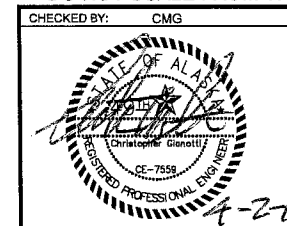


Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KJN Date 9/10/13

PE KTN Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO.1786

BRIDGE RAIL DETAILS

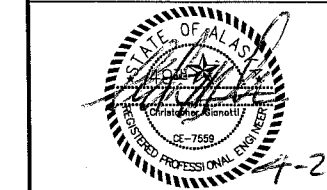
DESIGNED BY: JLD		BRIDGE RAIL DETAILS				
DRAWN BY: LRG						
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TAB: N10		Monday, April 02, 2012 4:34:00 PM		LANCE GREER		
REVISONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	69561/AC-BR-0003(151)	2012	N10	29

No.	DATE	DESCRIPTION

— SIGN

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR
& UPGRADE
TROUT STREET BRIDGE
NO. 1786**

**STRIPING AND
SIGNAGE PLAN**

PROJECT DESIGNATION

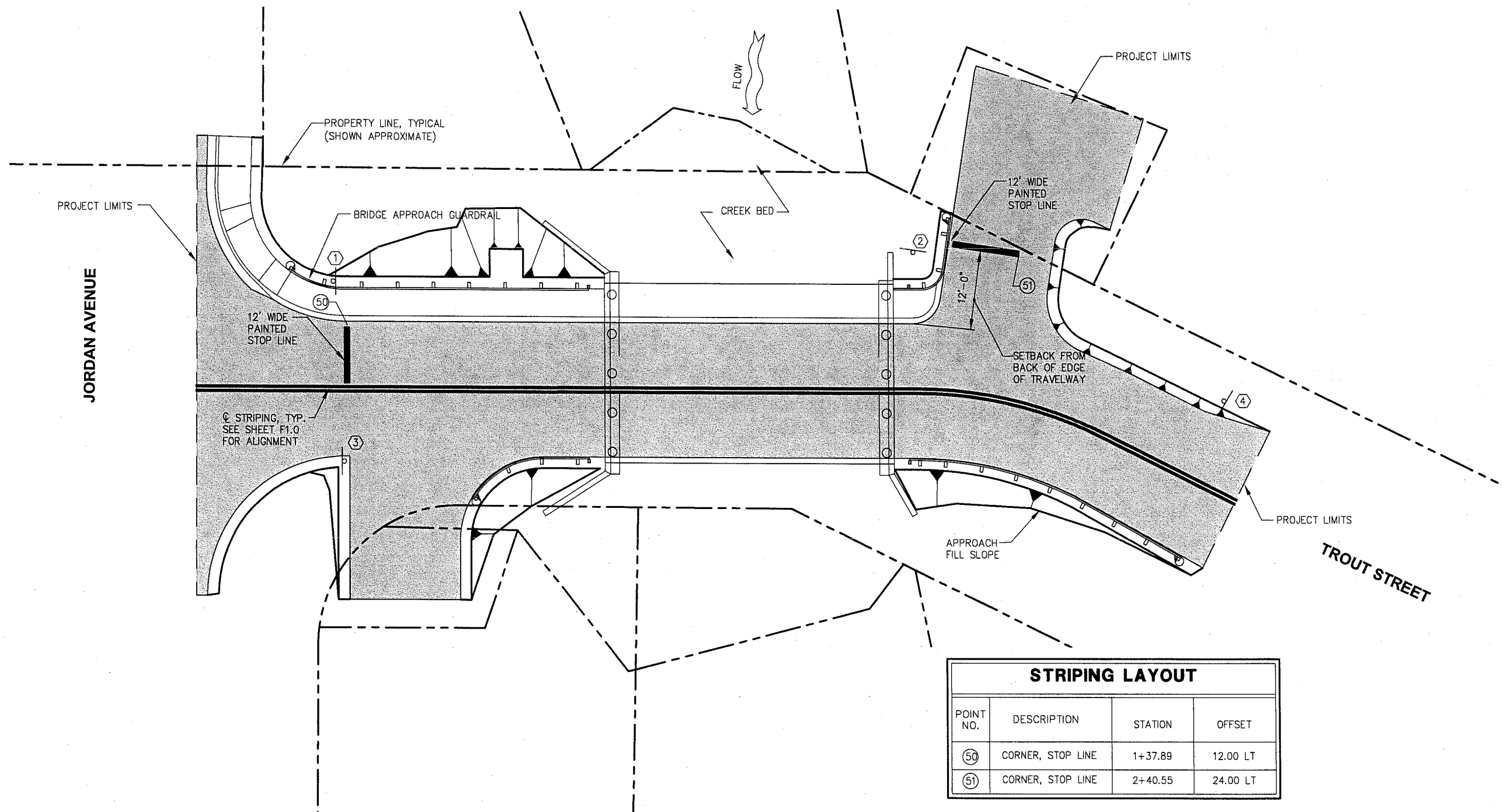
69561/AC-BR-0003(151)

STATE YEAR

ALASKA 2012

SHEET NUMBER TOTAL SHEETS

P1 29



NOTES:

1. ϕ STRIPING WITHIN PROJECT LIMITS OF ALIGNMENT ONLY. STRIPING SHALL BE DOUBLE 4" THICK YELLOW PER T21.02.
2. STOP LINE STRIPING SHALL PARALLEL JORDAN AVENUE ALIGNMENT AS SHOWN. STRIPING SHALL BE 12" THICK, 12" WIDE, WHITE PER ASDS.

STRIPING & SIGNAGE

SCALE IN FEET
0 10 20 FT.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.

PE KJW Date 9/10/13

STRIPING LAYOUT

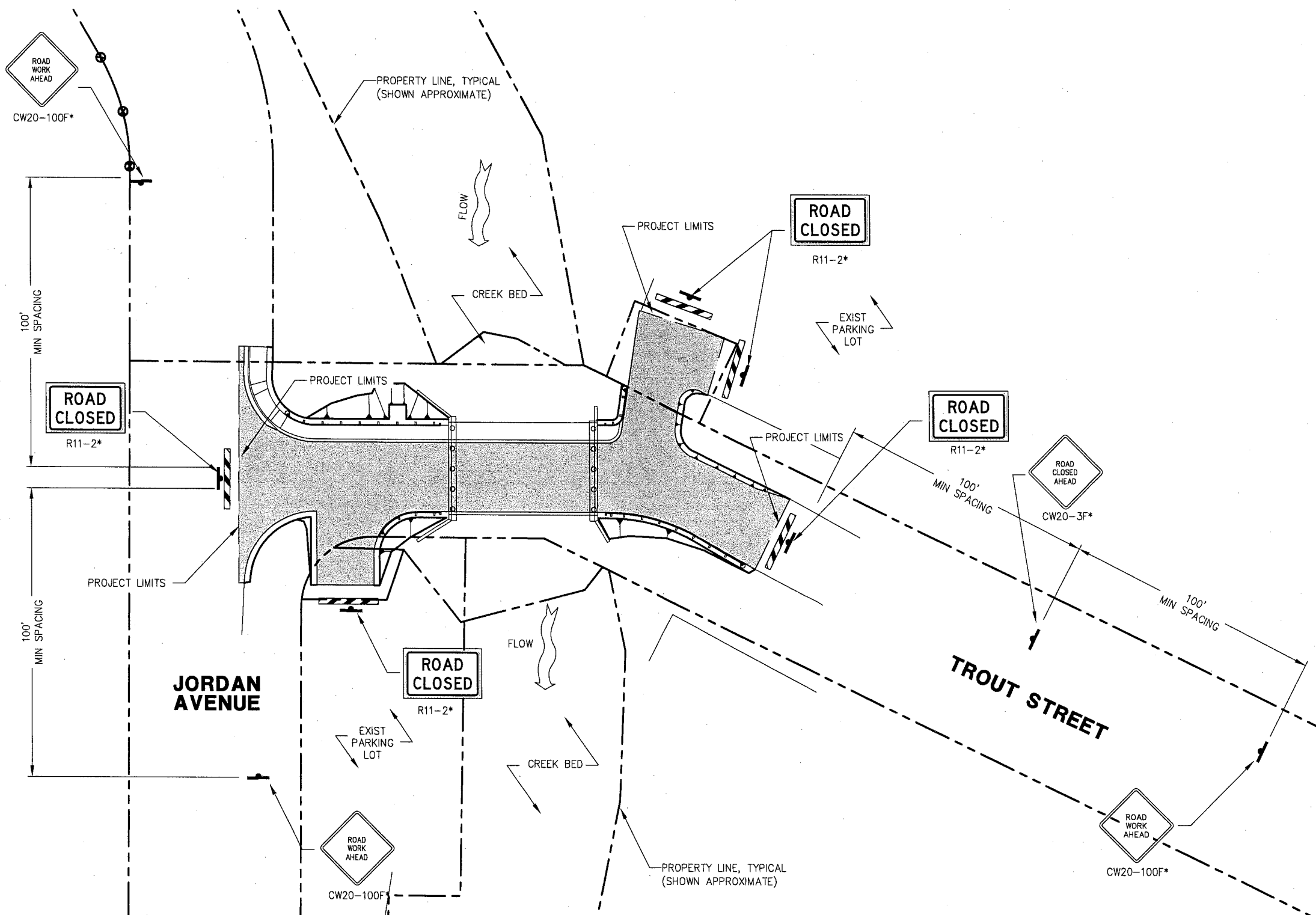
POINT NO.	DESCRIPTION	STATION	OFFSET
50	CORNER, STOP LINE	1+37.89	12.00 LT
51	CORNER, STOP LINE	2+40.55	24.00 LT

SIGNING SCHEDULE

SIGN NO.	* CODE NO.	DESCRIPTION	SIGN SIZE (INCH)	POST SIZE (INCH)	STATION	OFFSET
1	R1-1	STOP SIGN	30 x 30	2.0 O.D., TYP.	1+36.04	19.16 LT
2	R1-1	STOP SIGN	30 x 30	2.0 O.D., TYP.	2+40.55	24.71 LT
3	R2-1	20 MPH SPEED LIMIT SIGN	24 x 30	2.0 O.D., TYP.	1+37.87	12.92 RT
4	R2-1	20 MPH SPEED LIMIT SIGN	24 x 30	2.0 O.D., TYP.	2+92.37	15.24 LT

* CODES FROM U.S. DOT FEDERAL HIGHWAY ADMINISTRATION ASDS.

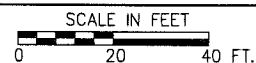
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



NOTES:

1. A TRAFFIC CONTROL PLAN IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION MUST BE SUBMITTED AND APPROVED PRIOR TO ANY MOBILIZATION OR WORK ONSITE.
2. *SEE ASDS FOR ALL SIGN REFERENCES SHOWN.

TRAFFIC CONTROL PLAN



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
 PE RJN Date 9/10/13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: N:\09XXX\092026 TROUT STREET BRIDGE\DRAWINGS\IPND\3 CIVIL\1.DWG

LANCE GREER
 TAB: S1 Monday, April 02, 2012 4:31:16 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

TYPE III BARRIER
 SIGN*

PLAN LEGEND

CHECKED BY: CMG



PLANS PREPARED BY PND ENGINEERS, INC.

DESIGNED BY: NAM

DRAWN BY: NAM

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 SOUTHEAST REGION

**JUNEAU BRIDGE REPAIR
 & UPGRADE
 TROUT STREET BRIDGE
 NO.1786**

TRAFFIC CONTROL PLAN

PROJECT DESIGNATION

69561/AC-BR-0003(151)

STATE	YEAR
ALASKA	2012

SHEET NUMBER	TOTAL SHEETS
S1	29

